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ABSTRACT

The Annual Test Report, 1981-82 has been developed as a reference on the results of the California Achievement Tests (CAT) in the Montgomery County Public Schools (MCPS). The report contains several analyses of the results from the CAT administration in Grades 3, 5, 8, and 11. Overall countywide results are presented and they are also broken down by racial/ethnic and sex classifications. School results are presented in four forms: (1) average subtest scores, (2) total battery interquartile ranges, (3) longitudinal trends (average score change for students tested in the same elementary school twice), and (4) nonlongitudinal trends (difference between average scores for students transferring into and out of each school). There are two appendices. The first one contains tables with detailed summary data. The second one is a glossary of technical testing terms which provides the definition, use(s), and some interpretive precautions to be observed for each term. (Author)

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MONTGOMERY COUNTY PUBLIC SCHOOLS ROCKVILLE, MARYLAND

Annual Test Report 1981-82

EDWARD ANDREWS
Superintendent of Schools

Prepared by the Department of Educational Accountability

TM 830 540

EXECUTIVE SUMMARY

The Annual Test Report 1981-82 has been developed to be a reference on the results of the California Achievement Tests (CAT) for the Montgomery County Public Schools. The CAT is administered in Grades 3, 5, and 8 under a state requirement and in Grade 11 under a local requirement. Some of the features of the report include:

- Breakdowns of county test results by racial/ethnic groups, including a comparison of performance by MCPS black and Hispanic students with that of their counterparts in the national norm sample
- Elementary school results broken down for students tested in a school in both Grades 3 and 5 and for students tested in those schools in only Grade 3 or Grade 5
- Graphic presentations of both county and school data
- A comparison of the California Achievement Tests (CAT), used for the first time in the 1980-81 school year, and the Iowa Tests of Basic Skills (ITBS), previously used for more than a decade.

Countywide Results

Performance by MCPS students on the CAT improved slightly from an already high level. This was shown by the fact that 77 percent of the MCPS students tested scored at or above the national norm average. This was a 1 percent increase from the previous year. Additionally, the MCPS average on the total test ranged from the 80th percentile in Grade 5 to the 75th percentile in Grade 11; a one-point increase at each end of the range. This consistently high performance across grades was in sharp contrast to declining scores that had been found on the ITBS from lower to higher grades. While the county averages were high, they probably would have been even higher, at least in Grade 3, if there were not a strong "ceiling effect" on some CAT subtests. This effect produced artifically low scores on these subtests because the test norms do not permit high achieving students to score as high as they should.

Performance by Racial/Ethnic Groups

The average scores for all major racial/ethnic groups in MCPS were at or above the national norm group average except for black students in Grade 11. Even in that case, the difference was not substantial. Scores in 1981 were generally higher than in 1980 for black and white students. The trends for Hispanic and Asian students were mixed across the grades.

The performance of white students in MCPS was substantially higher than that of MCPS Hispanic and black students. However, MCPS Hispanic and black students scored substantially higher than their counterparts nationally. Additionally, when compared to their counterparts nationally, MCPS Hispanic and black students did better than MCPS white students.

Asian students in MCPS scored slightly higher than white students in all grades except the eleventh where the two groups had the same average score.

Score Differences by Sex

Females scored slightly higher than males on the total test in all grades tested. Language skills is the only subject area in which females scored higher in all grades.

MONTGOMERY COUNTY PUBLIC SCHOOLS
Rockville, Maryland

ANNUAL TEST REPORT

1981-82

September 1982

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Superintendent of Schools

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INTRODUCTION

The Annual Test Report, 1981-82 has been developed as a reference on the results of the California Achievement Tests (CAT) in the Montgomery County Public Schools (MCPS). The report contains several analyses of the results from the CAT administration in Grades 3, 5, 8, and 11. Overall countywide results are presented and they are also broken down by racial/ethnic and sex classifications. School results are presented in four forms:

1. Average subtest scores
2. Total Battery interquartile ranges
3. Longitudinal trends (average score change for students tested in the same elementary school twice)
4. Nonlongitudinal trends (difference between average scores for students transferring into and out of each school)

There are two appendices. The first one contains tables with detailed summary data. The second one is a glossary of technical testing terms which provides the definition, use(s), and some interpretive precautions to be observed for each term.

DESCRIPTION OF CALIFORNIA ACHIEVEMENT TESTS

The California Achievement Tests (CAT) are standardized achievement tests required by the Maryland State Department of Education to be administered to all students in Grades 3, 5, and 8. Students in Grade 11 are given the CAT under a local requirement. The 1981-82 school year was the second year this new edition (1977 copyright) of the CAT was administered in MCPS. This test replaced the Iowa Tests of Basic Skills (ITBS) and Tests of Academic Progress (TAP), which had been given for the previous several years.

The CAT, like the ITBS and TAP, is a group-administered, norm-referenced test (NRT). Norm-referenced means that a student's scores are given interpretable meaning by being compared with the scores of a group of students. In the case of the CAT, this group is the nationwide sample on whom the test was normed in the 1976-77 school year. This comparison is most easily seen when results are reported as percentile ranks (PR).[1] These scores are presented in the tables in this chapter because of their ease of interpretation. Also reported are Normal Curve Equivalent (NCE) scores.[2] These are used to make comparisons across subtests and groups of students. A third type of score, reported in some tables, is the Scale Score (SS). This is included to provide data consistent with that to be reported by the Maryland State Department of Education.

The CAT measures five major content areas. Some of these contain more than one subtest. The content areas and their subtests follow:

Reading

- Phonic Analysis (Grade 3 only)
- Structural Analysis (Grade 3 only)
- Reading Vocabulary
- Reading Comprehension

Spelling

---

1. Percentile ranks indicate the percentage of students in the national norm group who scored lower than a given score. In the case of this report, the given score is the mean (average) of the county, of a group within the county (e.g., race, sex), or of a school. A more detailed discussion of statistical terms can be found in Appendix B.

2. Normal Curve Equivalent scores are used for these comparisons because they are on an equal interval scale. This means that a change of X points is the same, no matter what the scores are. This is not true for other standardized scores such as percentile ranks. For example, on the percentile rank scale, the difference between 85 and 95 is much larger than the difference between 45 and 55. On the NCE scale, both of these differences represent the same amount of score increase. See Appendix B for a detailed discussion.

Language

Language Mechanics
Language Expression

Mathematics

Mathematics Computation
Mathematics Concepts and Applications

Reference Skills (Grades 5, 8, and 11 only)

ANALYTIC CONSIDERATIONS

A tendency in analyzing test data is to compare results across grades and across years. When performing this kind of analysis it is necessary to consider potential interpretation problems that can prevent the use of the results for making judgements about program quality. These problems are created by:

1. Differences in the ability of the norm groups for the tests used at each grade level

2. Differences in the ability of the students tested in each grade each year

3. Differential degree of match between local curriculum and the content of the test at various grade levels

These problems are generally more serious when the results being compared are from two different test batteries, not just two levels within the same battery. Comparing different test batteries also adds another problem:

4. Differences in the question formats of each test

Differences in norm group ability. Since each test in each grade is normed on a different group of students, the ability of the various norm groups can play a role in interpreting standardized test results. The differences in the abilities of these norm groups mean that students taking the tests at different times and grade levels are being compared to different standards. For example, if test A was developed on a smarter group of students than was test B, a student needs to know more to get a high standardized score on test A than on test B. Thus, higher scores on test B could be a result of a student's being compared with a group that is not as smart; it would not necessarily be an indication of higher achievement.

Differences in ability of groups tested. Differences in the ability of the groups being tested each year can account for score increases and declines across years. Such score changes should be viewed as indications of changes in achievement level that are related to group or individual characteristics, not to program quality.

Test content/curriculum match. The match between standardized test content and any local curriculum is never complete. Differences in the degree of match for different tests or test levels mean that scores on the tests or levels may vary simply because students at one grade level are taught more of the skills measured by the test. Lower scores on one level of the test may not indicate a decline in achievement or quality of instruction but simply may reflect this difference in match.

Differences in question format. The way in which test materials are presented to a student can influence how well he/she performs. When the test used at each level is from the same battery, this format issue does not generally play a role. However, when results from different batteries are compared, question format can be important. Even when the subtests from the two batteries have the same or similar names, direct comparison of results can be clouded by format differences. The format differences between the CAT and ITBS are discussed below, organized by CAT subtests within major subject areas.

1. Reading

   a) Vocabulary (ITBS)/Reading Vocabulary (CAT)--The ITBS asks the student to find words that mean the same as a given word. The CAT contains some questions asking for the same meaning and some asking for the opposite meaning. It also has a few questions involving words with multimeanings. In these questions, a definition is provided and the student has to find the sentence in which the word is used with that definition.

   b) Reading Comprehension (ITBS)/Reading Comprehension (CAT)--The format is generally the same on both tests. Students are required to answer questions about passages they read.

2. Language Total--This section includes Spelling, Punctuation, Capitalization, and Language Usage on the ITBS. Spelling is not included in the CAT Language Total.

   a) Punctuation and Capitalization (ITBS)/Language Mechanics (CAT)--Each test measures capitalization by asking the student to find a capitalization mistake in a sentence. However, punctuation is measured differently. The ITBS asks for the location of the wrong punctuation in a sentence; the CAT asks for selection of the correct punctuation to be inserted into a sentence.

   b) Language Usage (ITBS)/Language Expression (CAT)--The ITBS asks students to find grammar mistakes in sentences. The CAT measures a variety of skills in this area including the identification of subject and verb, sentence structure, paragraph sequence, topic sentence, and clarity of expression.

3. Spelling (ITBS)/Spelling (CAT)--The ITBS asks the student to find an incorrectly spelled word in a list of words. The CAT asks the student to find an incorrectly spelled word in a sentence. Neither test asks the student to actually spell words and could not within the constraints of the optical scan format employed.

4. Math Total--On the ITBS the two subtests are Math Concepts and Math Problem Solving. On the CAT the subtests are Math Computation and Math Concepts and Applications.

   a) Math Computation (CAT)--There is nothing comparable on the ITBS.

   b) Math Concepts and Math Problem Solving (ITBS)/Math Concepts and Application (CAT)--The CAT combines into one subtest the skills measured by the two separate subtests on the ITBS.

5. Composite (ITBS)/Total Battery (CAT)--While each of these can be considered an overall measure of achievement, they represent performance on different sets of skills. All of the differences cited above can influence results here. Additionally, the ITBS has three work study skills subtests included in the Composite. The CAT Reference Skills subtest, the part of the CAT most similar to the ITBS work study skills section, is not included in the Total Battery score.

Overall County Data

The major findings from analyses of countywide results from the administration of the California Achievement Tests in the Fall of 1981 are as follows:

- Seventy-seven percent of the MCPS students tested scored at or above the national norm average on the Total Battery. This was an increase of 1 percent from 1980.
- County average (mean) scores showed a slight increase from 1980 on the Total Battery.
- Average scores were generally consistent across the four grades. This was also true in 1980 but differed from a declining pattern on the ITBS in previous years.
- County averages on several subtests were artificially depressed because of the ceiling effect[3] on those subtests.

MCPS performance compared to national performance. The only national data that is available to compare with MCPS results is from the national norm group.[4] In that group 50 percent of the students scored at or above the average, i.e., 50th percentile. The percentage of students scoring at or above this point on the Total Battery in MCPS averaged 77 across all grades tested and ranged from 79 in Grade 5 to 75 in Grade 11. This high level of performance is shown in Figure 1.1 where the percentage of students scoring at each stanine is shown for the national group and for the 4 MCPS grades combined. The national stanine distribution is symmetrical with equal percentages falling above and the below the average of 5. The distribution for MCPS is very different, with the percentage scoring in the high stanines (i.e., 7, 8, and 9) much higher than the national distribution. For example, 18 percent of the MCPS students scored at the 9th stanine compared to 4 percent nationally. The pattern is reversed for the low stanines, with only 1 percent of the MCPS students scoring in the bottom 2 stanines.

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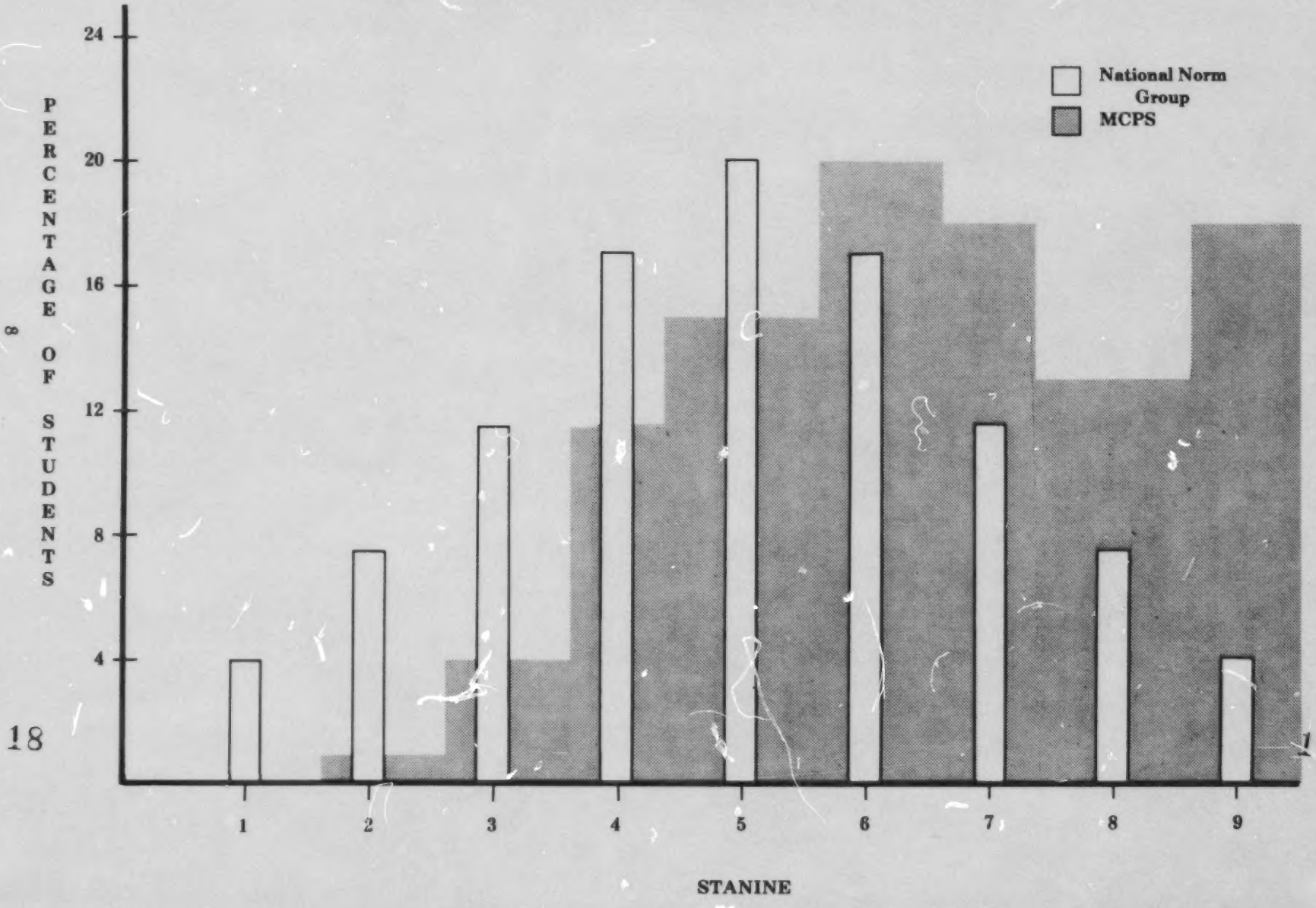
3. A ceiling effect is present when it is not possible for a student to score at the maximum (99th) percentile even if he/she answers all questions correctly. This effect also exists if only one or two careless errors can reduce a student's standardized score substantially, e.g., from stanine 9 to 6 or 7. This is caused by a test being too easy. On such a test, many people achieve a perfect or near perfect score, making a range of percentile ranks possible. When this happens, the conventional norming procedure is to assign the middle percentile rank to the perfect score. For example, on the California Achievement Tests, Level 13 Phonic Analysis subtest, 8 percent of the norm population got a perfect score. According to statistical theory these students could be anywhere from the 92nd to 99th percentile. The middle percentile rank, 96, was thus assigned to the perfect score.

4. It should be noted that the norm group is not necessarily representative of overall national performance. Test publishers generally have to use whatever districts will agree to participate in norming samples. There is no guarantee that they have been able to include the proper proportion of high, middle, and low scoring students. That is one of the reasons for potential problem number 1 discussed in the "Analytic Considerations" section above.

FIGURE 1.1
CALIFORNIA ACHIEVEMENT TESTS, FALL 1981
DISTRIBUTION OF STANINE SCORES ON
THE TOTAL BATTERY FOR ALL GRADES TESTED



The pattern of results does not change very much across the major subjects, with 78 percent being at or above the national average in language and math and 77 percent meeting that criterion in reading. Table A1 in the Appendix shows the number and percentage of students scoring at or above the national average by major subject area in each grade.

Historical trends within MCPS. The students tested in the fall of 1981 improved slightly from the already high level of performance demonstrated by students tested in the previous year. In 3 of the 4 grades tested, the average Total Battery score went up 1 NCE point each. In Grade 5, where the scores were highest each year, the average remained constant. These trends are shown in Figure 1.2.

Of the 33 subtests administered across 4 grades, there was an increase in the county average from 1980 to 1981 in 24. The average for the other 9 subtests remained the same. Reading Comprehension and Math Computation were the only subjects that improved in all 4 grades. The detailed data showing historical trends are found in Tables A2 and A3 in Appendix A.

Patterns of performance across grades. There was little variation in average scores across the grades tested in MCPS. The highest average NCE score in the Total Battery was 67 in Grade 5 and the lowest was 64 in Grade 11 (see Figure 1.2). This consistency was also found in the various subject areas. The largest range was 5 NCE points in Language--Grade 5 averaged 68 and Grade 11 averaged 63. Detailed data are presented in Tables A2 and A3 in Appendix A.

The consistent score pattern across grades is especially noteworthy because when the Iowa Tests of Basic Skills (ITBS) were administered, the results generally showed a decline in scores from lower to higher grades. This score decline caused some concern. A response to that concern was to look at the score patterns for students tested in MCPS in two grades (defined as the longitudinal groups) and those tested in MCPS in only one grade (defined as the nonlongitudinal groups) to see if the transferring students were causing the decline. It was found that both the longitudinal (L) and nonlongitudinal (NL) groups generally had similar declining score patterns. The data from the 1981-82 school year show that the change to the CAT has eliminated this decline for the overall MCPS population. It has also eliminated the decline for the L and NL groups considered separately (see Tables A4 to A6 in the Appendix). In fact, results for the longitudinal group tested in MCPS in Grade 5 (ITBS) and Grade 8 (CAT) show a 5-NCE-point increase on the total test. The change in score patterns from the ITBS to the CAT is probably more a function of using a new test than any dramatic shift in achievement. It is possible that, as the CAT becomes older, its content may diverge more from what is actually being taught, especially in the upper grades where more of the students' time is taken up with electives. This may well cause declines across grades for the CAT, just as we experienced them for the ITBS.

Influence of ceiling effect. The ceiling effect was strongest in Grade 3 on the reading and language subtests (see Figure 1.3). Scores of from 26 to 57 percent of the students tested were possibly influenced by the ceiling effect on these subtests. Reference Skills scores in Grades 5, 8, and 11 were similarly affected with from 30 to 48 percent of the scores influenced. In contrast, only a few of the subtests on the ITBS had a slight ceiling effect. The percentage of students whose scores might have been influenced by the ceiling effect was much smaller on the ITBS. See Table A7 in Appendix A for detailed data.

FIGURE 1.2
CALIFORNIA ACHIEVEMENT TESTS
MEAN NCE SCORE ON TOTAL BATTERY
1980 AND 1981

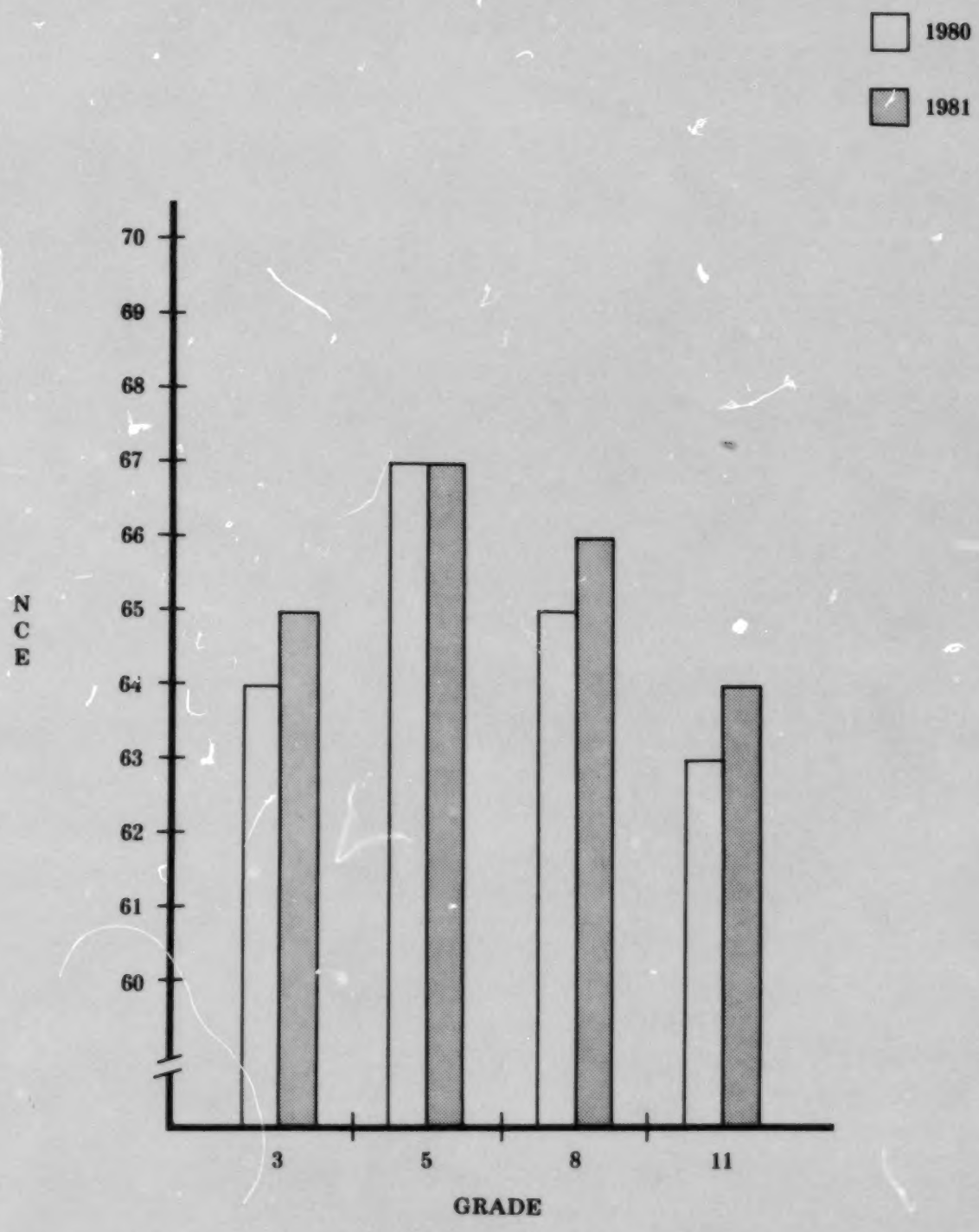
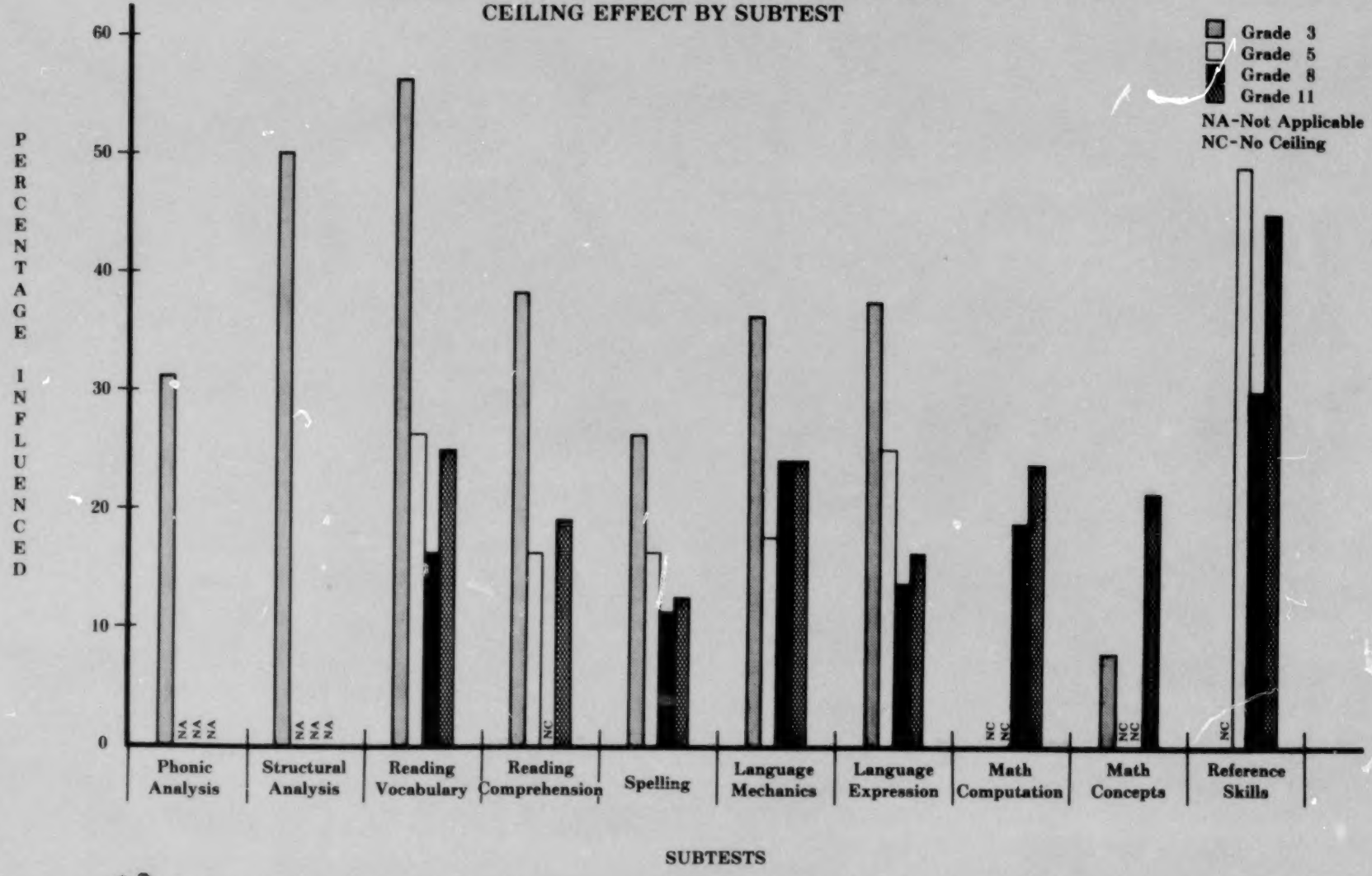


FIGURE 1.3
PERCENTAGE OF STUDENTS INFLUENCED BY CEILING EFFECT BY SUBTEST



Data by Racial/Ethnic Group

MCPS began reporting test data by racial/ethnic groups in 1978 as part of the systemwide effort to monitor educational equity. The change in tests has not led to any significant change in the results from those reported in past years. The results for the fall of 1981 administration are highlighted by the following:

- Average scores for all racial/ethnic groups, except for black students in Grade 11, were at or above the overall national norm average on the Total Battery. The Grade 11 black students were only slightly below the national norm average.

- Compared to 1980, average scores on the Total Battery increased slightly in three grades each for black and white students. Their scores remained the same in the other grade. The trend of average scores for Asian and Hispanic students showed more variation by grade.

- White students scored substantially[5] higher than black and Hispanic students on the Total Battery in all grades tested. Asian students scored slightly higher than white students in all grades except the eleventh where the two groups had the same average score.

- The score difference between black and white and Asian and white students tended to decrease slightly from 1980. The score difference between Hispanic and white students tended to increase slightly.

- Average scores for black, white and Hispanic students in MCPS are well above the national norm averages for members of those racial/ethnic groups.

- MCPS black and Hispanic students performed better, compared to their racial/ethnic counterparts in the national norm group, than did MCPS white students.

Performance of MCPS racial/ethnic groups compared to overall national norm group performance. The average Total Battery scores for the major racial/ethnic groups in MCPS were at or above the average of the national norm group. The one exception to this was the black students in Grade 11 whose average of 47 NCE points is slightly below the national average. This score pattern was the same for the major subject areas. Figures 1.4 to 1.7 show the results for the Total Battery for each grade by race. Tables A8 to A11 in Appendix A have the detailed results by subtest for each race.

Score trends for MCPS racial/ethnic groups. The overall county trend of a slight increase from 1980 to 1981 on the Total Battery was generally reflected in the results for black and white students. Black students had a 2- to 3-NCE point increase in each of 3 grades and their average remained constant in

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5. Substantial is defined here as at least 8 NCE points. This is more than one-third of a standard deviation, a criterion often used to indicate meaningful differences.

FIGURE 1.4
TRENDS FROM 1980 TO 1981 ON CAT TOTAL BATTERY
FOR ASIAN STUDENTS

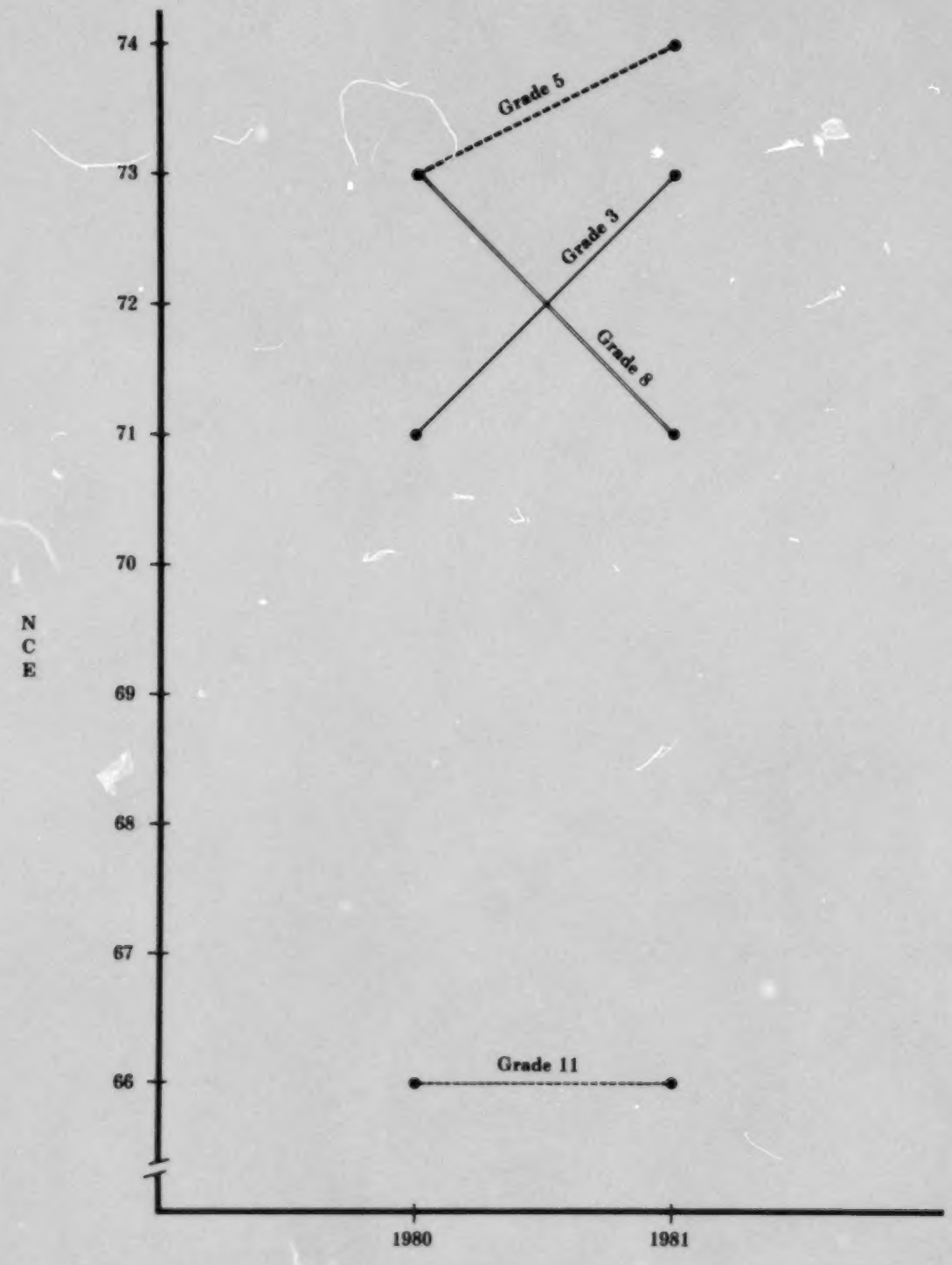

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FIGURE 1.5
TRENDS FROM 1980 TO 1981 ON CAT TOTAL BATTERY
FOR BLACK STUDENTS

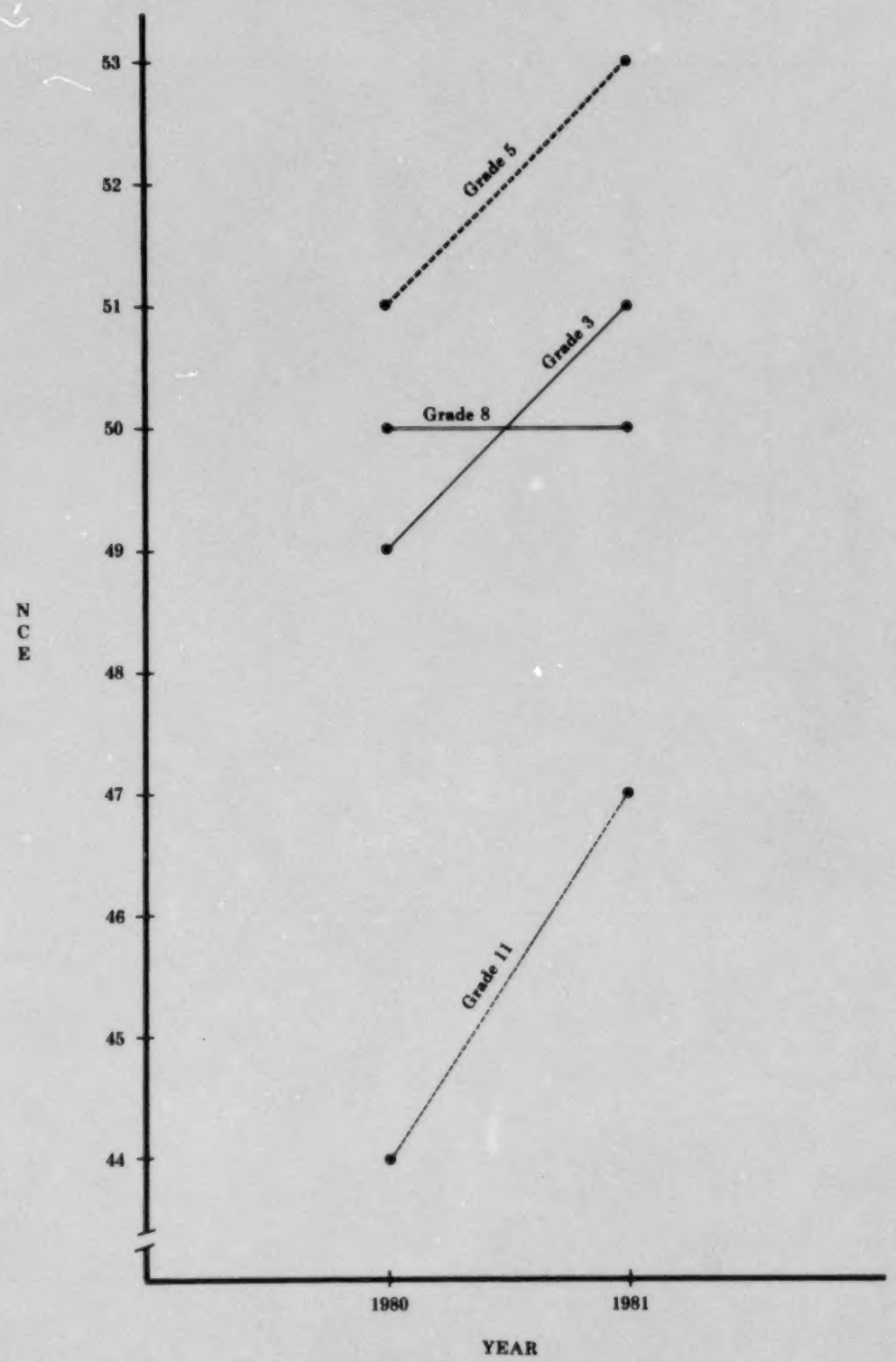


FIGURE 1.6
TRENDS FROM 1980 TO 1981 ON CAT TOTAL BATTERY FOR HISPANIC STUDENTS

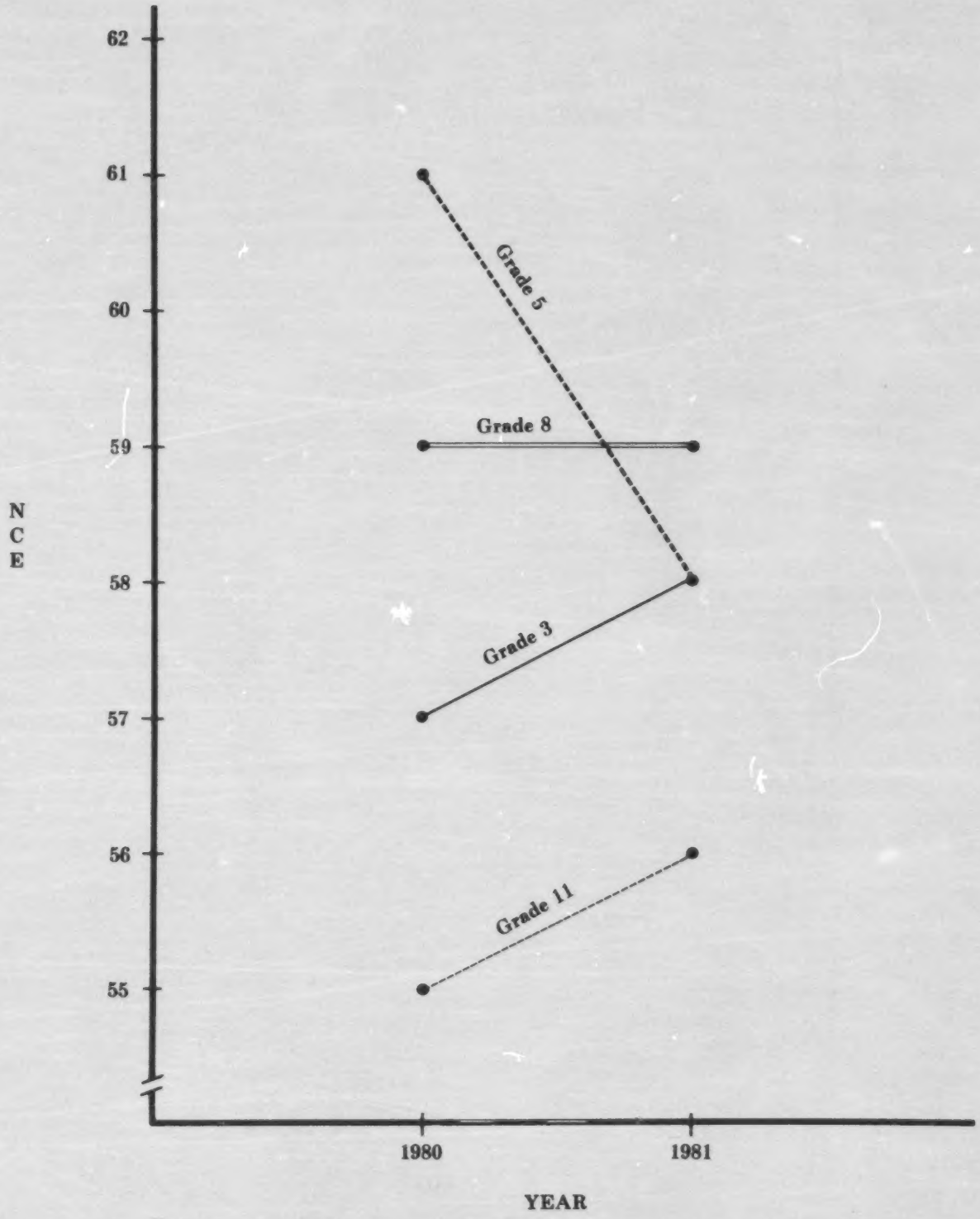
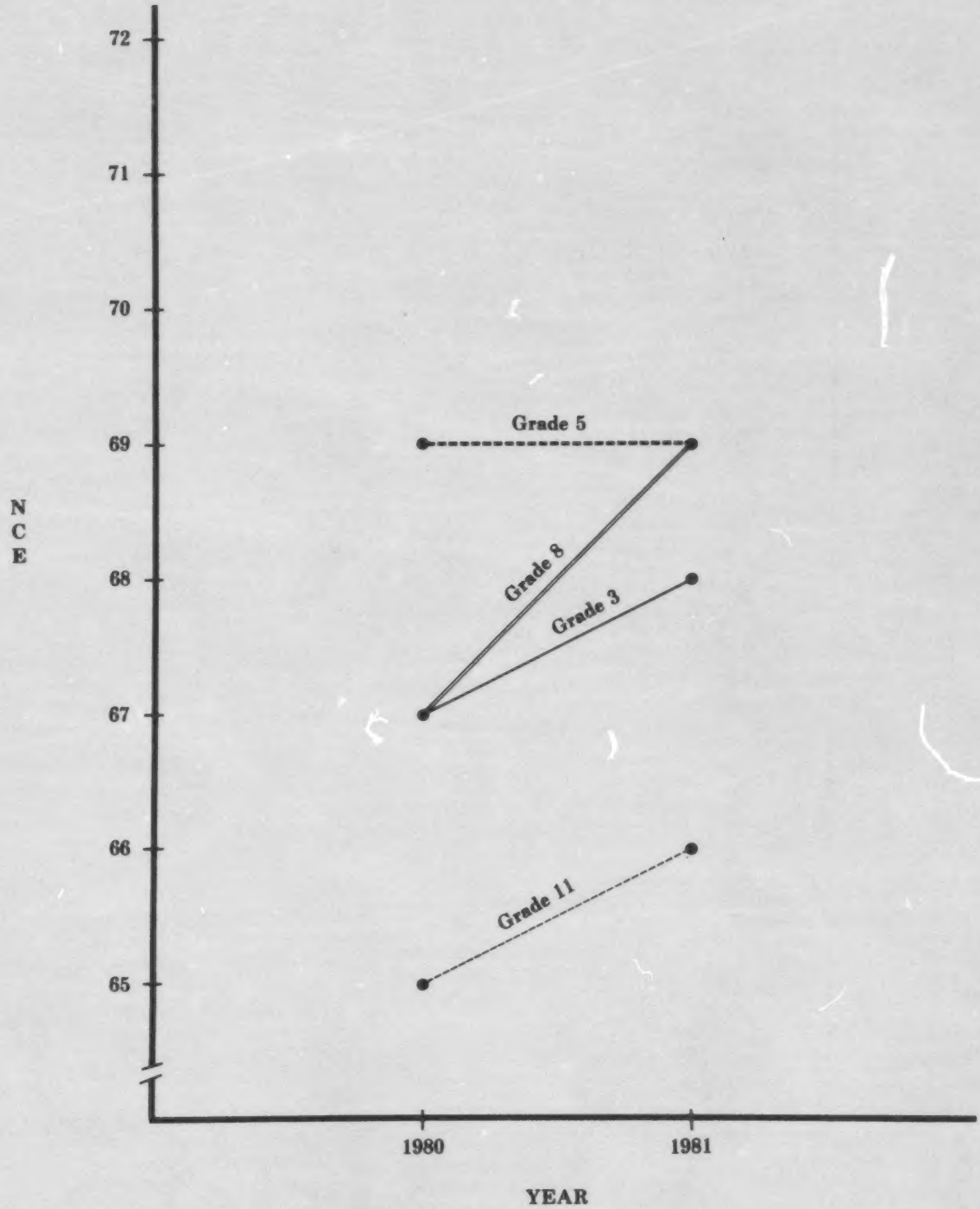


FIGURE 1.7
TRENDS FROM 1980 TO 1981 ON CAT TOTAL BATTERY
FOR WHITE STUDENTS



Grade 8. White students had a 1- to 2-NCE point increase in each of 3 grades and their average remained constant in Grade 5. Asian and Hispanic students had score increases in two grades, no change in one, and a decline in one. For the Asian students, the decline was 2 NCE points in Grade 8. For the Hispanic students, it was 3 points in Grade 5.

Another way to look at score trends for the various racial/ethnic groups is by tracing the results for the same students for two different test administrations, i.e., longitudinal analysis. As previously pointed out, score changes in this kind of analysis can be caused by differences in the tests given at each grade. However, some meaning can be derived from group trends if these differences can be taken into account. One way to do this is to establish a baseline against which to compare each group trend. The county longitudinal trend can be used as this baseline. Since white students make up more than 80 percent of the students tested, their trend is usually the same as the county trend. The three minority groups generally had trends as good as or better than the overall county trend on the total test and each subject area. The only exception on the total test was for black students tested in Grade 3. This trend was 1 NCE point below the county trend. Longitudinal and nonlongitudinal results by race are shown in Tables A12 to A19.

Majority/Minority score comparisons within MCPS. White students averaged between 16 (Grade 5) and 19 (Grade 11) NCE points higher than black students on the Total Battery. While these differences are substantial, they represent a 1- to 2- point decrease from 1980 in all grades except the eighth where the difference increased by 2 points. This pattern was similar for each subject area.

White students averaged 10 or 11 NCE points higher than Hispanic students on the Total Battery. In Grades 5 and 8, the difference increased from 1980 by 3 and 2 NCE points, respectively.

Asian students averaged from 2 to 5 NCE points higher than white students on the Total Battery in Grades 3, 5, and, 8. The two groups had the same average in Grade 11. The major reason that Asian students tended to score higher on the Total Battery was the fact that they scored 7 and 8 points higher on the Math Total. White students scored higher on the Reading Total in all grades except the third where the two groups were even. The results on the Language Total were mixed, with Asian students a little higher in the elementary grades and white students a little higher in the secondary grades. In Grades 3 and 5 the difference between these groups increased from 1980 by 1 point on the Total Battery. In Grade 8 the difference decreased by 4 points, and in Grade 11 a 1- point difference seen in 1980 disappeared.

The results by race for each subtest can be found in Tables A8 to A11 in Appendix A.

Majority/Minority score differences in MCPS compared to those in the national norm group. The score differences between white and minority groups have been noted each year since 1978. However, because of lack of data before 1980, it was not possible to compare these differences with ones reported elsewhere. This situation has now changed because McGraw-Hill, the publisher of the CAT, has reported data on the performance of "black," "Hispanic," and "other" students in the national norm sample. The third group, "other," combines white, Asian, and American Indian students. These data provide a way to compare performance of various racial/ethnic groups in MCPS with that of students of the same racial/ethnic background in a national group.

Additionally, these data provide a benchmark against which to compare the score differences found in MCPS.

The results discussed in this section may be slightly different from other sections because of the "other" group discussed above and because the McGraw-Hill results are reported in raw score terms, not NCEs.[6]

While MCPS black and Hispanic students score substantially below MCPS white students, they score well above their counterparts in the national norm group. In Grades 3, 5, and 8 on the Total Battery, the MCPS minority group students averaged from 17 to 20 NCE points above the members of their racial groups in the national norm sample. The difference for white students cannot be determined exactly, but a very good estimate can be made from looking at the results of the "other" group since the white students made up over 90 percent of that group. The Total Battery differences for "other" students were 15 to 16 NCE points. The results are similar for each major subject area. Summary results are presented in Table A20 in the Appendix.

The fact that the MCPS/national differences were larger for black and Hispanic students than for "other" students means that, when compared to their racial/ethnic counterparts in the national norm group, MCPS minority students perform slightly better than MCPS white students. Another way to look at these results is that the score differences between black and white and Hispanic and white students are smaller in MCPS than they are nationally. The MCPS/national differences on the Total Battery are shown in Figure 1.8.

Cautions to be observed when reviewing results for Asian and Hispanic students. The results for Asian and Hispanic students are not as representative of the skills of these groups as are the results for white and black students since many Asian and Hispanic students are exempted from testing because they cannot read English well enough to obtain valid results on the test. Additionally, some members of these groups who are able to take the test probably do not know English well enough to perform up to their full capabilities. The extent of the exemptions can be seen in Table A21 which shows the percentage of students in each racial/ethnic group who were tested in the fall of 1980 and 1981. In 1981 about 76 percent of the enrolled Hispanic students and 81 percent of the enrolled Asian students were tested. These figures compare to 95 for white students and 92 for black students.

Data for Males and Females

Another part of the effort to monitor educational equity in MCPS has been to analyze test results for males and females. The results from this analysis are highlighted by the following:

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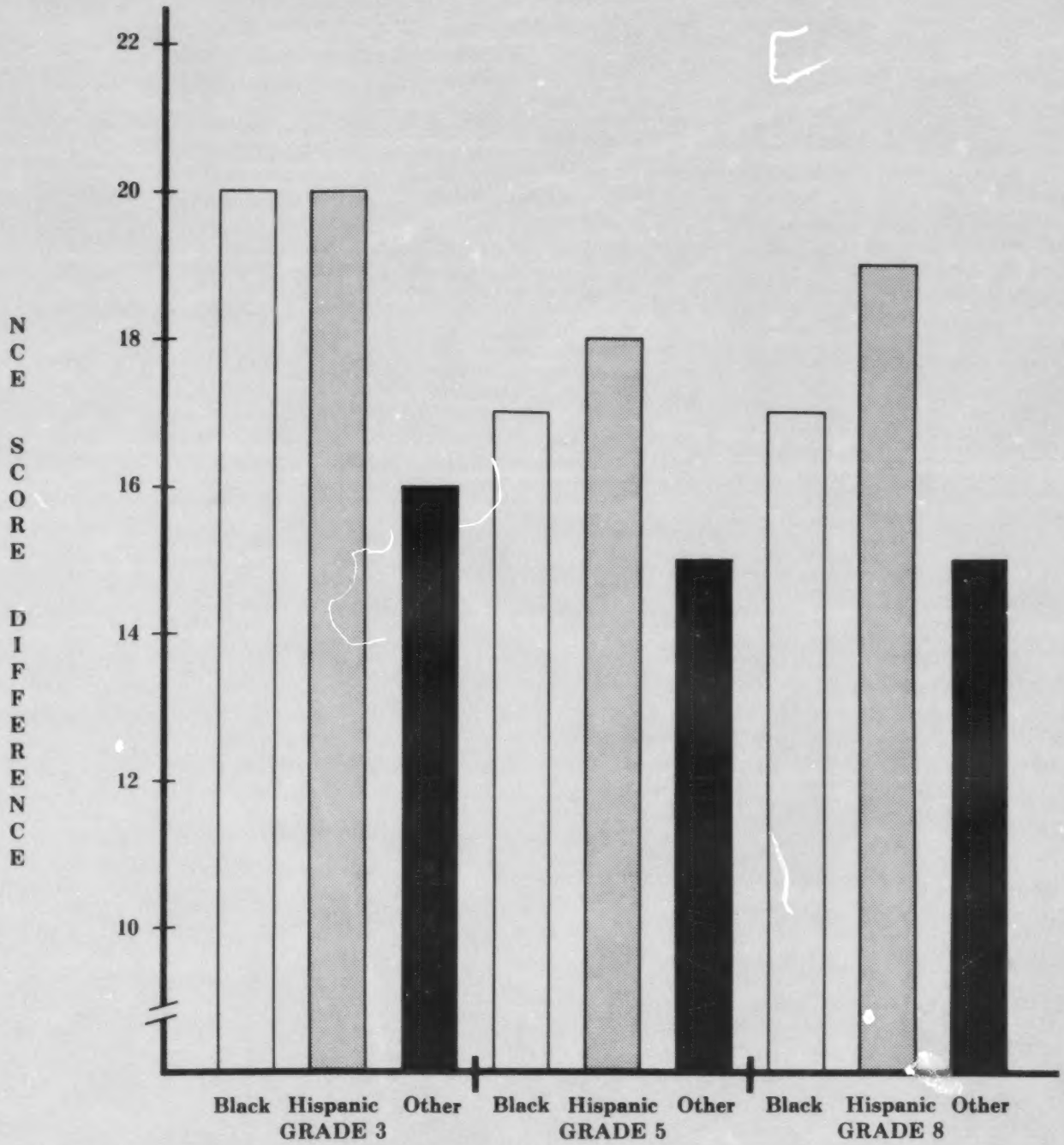
6. To obtain comparable local data the MCPS averages had to be recomputed using raw scores. The MCPS and McGraw-Hill raw score averages were then converted to NCEs. Converting mean scores computed in another metric to NCEs is a questionable procedure. To take advantage of the equal interval property of NCEs, they should be used for computing the mean. However, in this case it was necessary to make such a conversion to a standardized score so results from different testing times could be compared. MCPS students were tested in the fall and the McGraw-Hill results were from a spring testing. There was no way to make meaningful comparisons of raw scores from tests administered seven months apart.

FIGURE 1.8
AVERAGE SCORE DIFFERENCES BETWEEN MCPS STUDENTS AND STUDENTS IN THE NATIONAL NORM GROUP

(Tests administered in MCPS in November 1981)



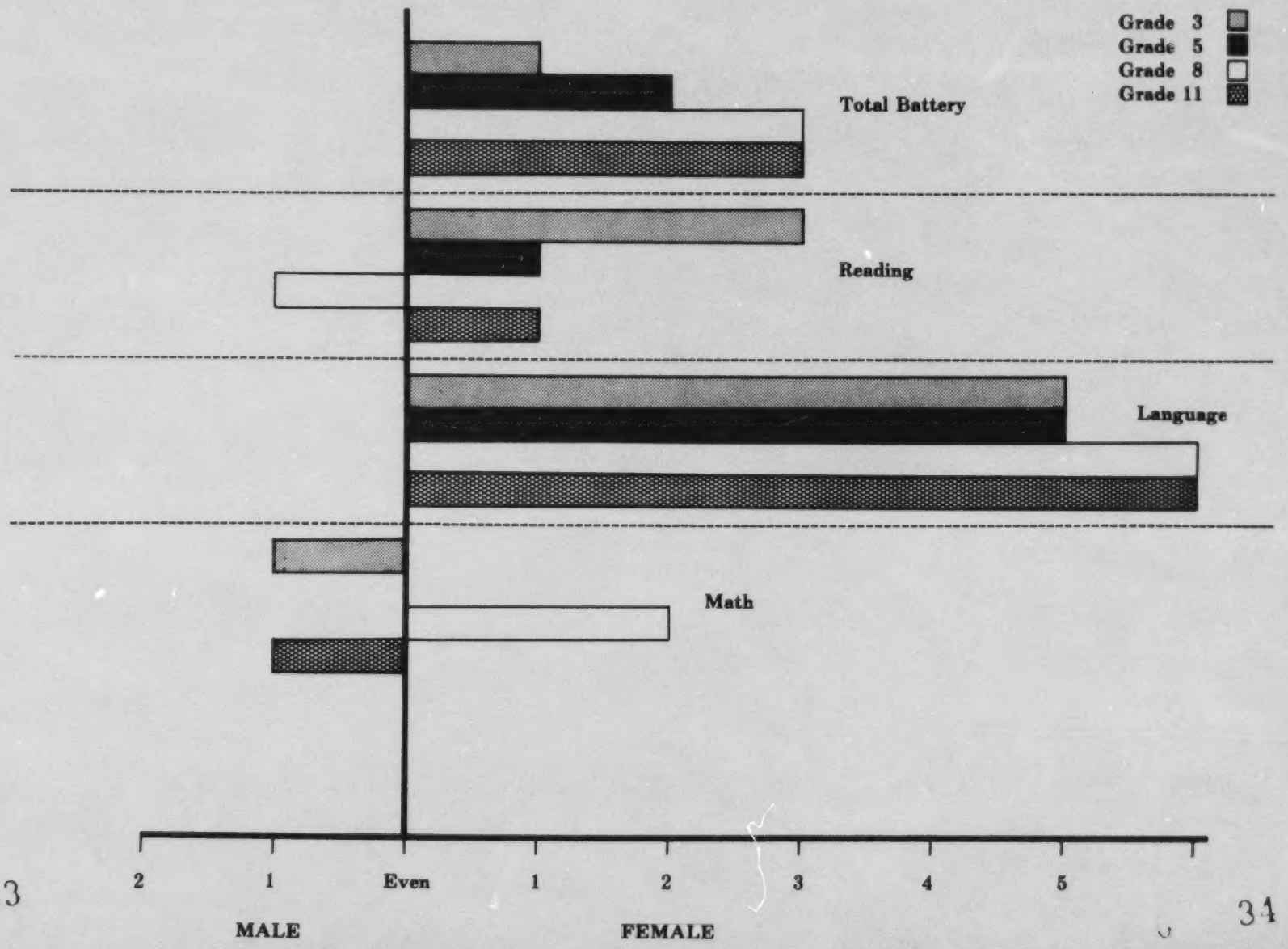
- Females scored slightly higher than males on the Total Battery in all grades tested.

- Language skills was the only subject area in which females scored higher in all grades.

The score differences between males and females ranged from 1 (Grade 3) to 3 NCE points (Grades 8 and 11). This small range was the same as in the fall of 1980.

The largest and most consistent differences between the sexes were found in the language skills where females averaged 5 to 6 points higher. Females tended to do slightly better in reading and males tended to do slightly better in math. The major exception to these patterns was in Grade 8 where males were 1 point higher in reading and females were 2 points higher in math. The two groups scored the same in math in Grade 5. These results are illustrated in Figure 1.9. Detailed results by sex are presented in Tables A22 to A25 in the Appendix.

FIGURE 1.9
CALIFORNIA ACHIEVEMENT TESTS, NCE SCORE DIFFERENCES
FOR MCPS MALES AND FEMALES, FALL 1981



SCHOOL RESULTS

Average Subtest Scores

School averages are listed in Tables 1 to 4. The scores reported are grouped by major subject area and also include the Total Battery. These lists are in alphabetical order by grade. The first page for each grade follows:

Grade 3--Page 24

Grade 5--Page 30

Grade 8--Page 36

Grade 11--Page 38

TABLE 1

CALIFORNIA ACHIEVEMENT TESTS RESULTS BY SCHOOL
FALL, 1981 THIRD GRADE RESULTS

SCHOOL	SCHOOL #	# TESTED	TOTAL BATTERY NCE MEAN	TOTAL BATTERY SS MEAN	TOTAL BATTERY PER RANK	PHONICS ANALYSIS NCE MEAN	PHONICS ANALYSIS SS MEAN	PHONICS ANALYSIS PER RANK	STRUCTURAL ANALYSIS NCE MEAN	STRUCTURAL ANALYSIS SS MEAN	STRUCTURAL ANALYSIS PER RANK	READING VOCABULARY NCE MEAN	READING VOCABULARY SS MEAN	READING VOCABULARY PER RANK	READING COMPREHENSION NCE MEAN	READING COMPREHENSION SS MEAN	READING COMPREHENSION PER RANK	TOTAL READING NCE MEAN	TOTAL READING SS MEAN	TOTAL READING PER RANK
ARCOLA	790	13	67	406	79	53	393	58	70	434	83	53	396	56	55	414	59	57	398	64
ASHBURTON	425	52	74	423	89	60	410	69	68	429	81	65	427	77	67	448	79	68	427	81
AYRLAWN	421	23	59	394	69	50	383	51	59	405	68	61	416	70	58	422	64	56	396	62
BANNOCKBURN	420	41	75	426	91	66	427	78	65	420	77	73	447	87	73	462	86	74	443	88
BARNSLEY	505	50	75	423	89	62	416	72	68	429	81	69	435	81	67	447	79	69	428	82
BELLS MILL	607	41	68	409	81	61	415	72	64	418	76	66	429	78	66	444	77	67	424	80
BELMONT	513	39	77	426	91	70	438	83	73	442	87	67	432	80	70	456	83	74	441	87
BEL PRE	780	32	73	419	87	58	406	66	70	436	84	60	413	68	62	433	71	63	412	73
BETHESDA	401	38	73	421	88	64	421	75	60	407	69	66	430	79	71	456	83	69	431	83
BEVERLY FARMS	226	55	76	424	90	60	411	69	68	429	81	69	436	82	67	447	79	68	427	81
BRADLEY	410	25	76	426	91	62	416	72	69	433	83	68	435	81	69	451	81	70	430	83
BROAD ACRES	304	30	54	381	56	49	381	50	52	385	55	49	388	49	46	391	43	48	374	47
BROOKHAVEN	807	47	69	414	85	61	413	70	69	433	83	64	424	75	64	437	73	67	423	79
BROOKMONT	414	24	76	427	91	61	414	71	61	410	71	71	443	85	67	447	79	70	432	84
BROOKVIEW	307	9	51	376	51	44	368	41	52	386	55	45	377	41	44	385	39	45	366	41
BROWN STATION	559	90	60	394	69	54	395	59	56	395	62	59	413	68	61	431	70	59	402	67
BURNING TREE	419	49	89	457	98	71	443	85	69	432	83	73	447	87	74	465	87	78	453	91
BURTONSVILLE	302	23	71	417	86	59	407	67	66	423	78	57	406	63	62	433	71	61	408	71
CANDLEWOOD	508	43	61	395	70	53	393	58	58	402	66	62	419	72	59	427	67	59	401	66
CANNON ROAD	310	53	68	409	81	59	407	67	64	418	76	64	425	76	64	439	75	65	418	77
CARDEROCK SP.	604	41	84	444	96	72	446	86	75	448	89	73	447	87	73	462	86	79	456	92
CASHELL	511	60	66	404	78	65	426	77	63	415	74	66	429	78	62	435	72	67	424	80
CEDAR GROVE	703	26	66	409	81	56	399	62	62	412	72	62	420	73	61	431	70	62	410	72
CHEVY CHASE	403	63	67	407	80	57	403	64	58	403	67	65	426	76	65	440	75	63	413	74
CLARKSBURG	101	51	60	394	69	55	398	61	57	399	64	60	413	68	59	425	66	59	403	67
CLOVERLY	308	42	62	397	72	58	404	65	63	417	75	65	425	76	61	430	69	62	410	72
COLD SPRING	238	56	82	440	95	64	422	75	72	440	86	72	444	86	72	461	85	74	443	88
COLLEGE GARDEN	229	47	72	419	87	62	417	73	59	405	68	67	431	79	68	450	80	68	426	81
CONGRESSIONAL	218	26	70	413	84	43	364	38	61	411	72	61	418	71	59	425	66	54	389	58
CONNECTICUT PK.	779	29	64	401	75	61	414	71	64	420	77	62	420	73	59	427	67	63	414	74
CRESTHAVEN	808	35	74	420	88	62	418	73	65	421	77	66	429	78	65	442	76	68	426	81
DAMASCUS ES	702	76	72	419	87	61	415	72	70	436	84	66	428	78	66	444	77	68	427	81
DARNESTOWN	351	46	69	412	83	60	410	69	68	431	82	65	426	76	68	449	80	67	424	80
DIAMOND	570	85	68	409	81	59	407	67	65	420	77	64	424	75	66	444	77	65	420	78
DUFIEF	241	61	68	408	81	57	402	64	62	414	73	66	429	78	63	436	73	64	414	74
E. SILVER SPRING	756	50	45	365	40	43	362	37	45	366	41	47	381	44	50	402	51	45	367	42
FAIRLAND	303	48	67	407	80	59	409	68	68	431	82	60	414	69	61	430	69	64	415	75
FALLSMEAD	233	44	72	417	86	60	411	69	64	418	76	68	435	81	65	440	75	67	422	79
FARMLAND	219	44	78	433	93	66	429	79	72	441	86	74	449	88	70	455	83	75	447	89
FIELDS ROAD	566	40	64	401	75	56	400	62	58	400	65	60	415	69	64	438	74	61	408	71
FLOWER VALLEY	506	52	70	414	85	59	408	67	63	416	74	62	418	71	65	442	76	64	416	75
FOREST GROVE	768	15	68	407	80	58	405	66	59	404	67	69	436	82	63	436	73	63	413	74
FOREST KNOLLS	803	30	66	407	80	50	385	52	59	403	67	64	423	75	63	435	72	59	403	67
FOUR CORNERS	763	43	64	403	77	51	385	52	64	417	75	57	406	63	60	428	68	59	402	67
FOX CHAPEL	106	56	60	394	69	55	397	60	52	384	54	57	407	64	56	416	60	56	394	61
GAITHERSBURG ES	553	80	59	393	68	55	398	61	62	414	73	55	401	59	58	423	65	59	402	67
GALWAY	313	42	63	400	75	54	394	58	64	417	75	53	397	56	57	420	63	57	398	64

TABLE 1 (continued)

CALIFORNIA ACHIEVEMENT TESTS RESULTS BY SCHOOL
FALL, 1981 THIRD GRADE RESULTS

SCHOOL	SPELLING NCE MEAN	SPELLING SS MEAN	SPELLING PER RANK	LANGUAGE MECHANICS NCE MEAN	LANGUAGE MECHANICS SS MEAN	LANGUAGE MECHANICS PER RANK	LANGUAGE EXPRESSION NCE MEAN	LANGUAGE EXPRESSION SS MEAN	LANGUAGE EXPRESSION PER RANK	TOTAL LANGUAGE NCE MEAN	TOTAL LANGUAGE SS MEAN	TOTAL LANGUAGE PER RANK	MATH COMPUTATION NCE MEAN	MATH COMPUTATION SS MEAN	MATH COMPUTATION PER RANK	MATH CONC & APP NCE MEAN	MATH CONC & APP SS MEAN	MATH CONC & APP PER RANK	TOTAL MATH NCE MEAN	TOTAL MATH SS MEAN	TOTAL MATH PER RANK
ARCOLA	65	475	77	64	479	75	60	460	70	64	461	76	73	377	86	66	425	80	71	401	84
ASHBURTON	67	480	79	69	493	82	66	478	79	69	478	84	79	394	94	68	430	83	75	412	91
AYRLAWN	58	452	66	64	480	75	62	464	72	63	460	75	58	352	66	58	407	65	59	383	68
BANNOCKBURN	62	465	73	79	517	92	76	506	89	81	515	94	68	374	84	72	437	87	72	406	87
BARNSLEY	69	487	82	73	502	87	69	485	82	74	492	89	74	382	89	72	436	86	75	409	89
BELLS MILL	64	471	75	70	493	82	69	485	82	71	484	86	59	355	69	66	424	79	64	391	76
BELMONT	71	492	84	84	530	95	72	492	85	81	514	94	70	373	83	74	441	88	74	406	87
BEL PRE	69	486	82	80	520	93	63	469	75	75	494	89	77	389	92	68	427	81	74	409	89
BETHESDA	61	461	71	71	497	84	69	486	82	73	490	88	68	374	84	72	437	87	72	406	87
BEVERLY FARMS	65	473	76	74	506	88	64	469	75	71	483	86	80	394	94	72	435	86	78	415	92
BRADLEY	64	471	75	81	521	93	68	481	80	77	500	91	77	389	92	72	437	87	76	413	91
BROAD ACRES	47	412	44	60	470	69	53	439	56	57	440	62	60	356	70	54	398	57	58	380	65
BROOKHAVEN	64	472	76	76	510	90	63	468	74	72	486	87	70	375	84	63	419	75	67	398	81
BROOKMONT	63	466	73	66	485	78	67	479	79	68	472	82	82	402	96	72	437	87	80	419	94
BROOKVIEW	56	443	61	63	476	73	52	438	55	57	443	65	51	339	54	51	391	51	52	370	55
BROWN STATION	54	437	58	59	468	68	57	450	64	59	447	67	55	348	62	60	411	69	59	382	67
BURNING TREE	78	517	91	82	526	94	80	518	93	85	528	96	92	424	99	81	457	93	90	439	98
BURTONSVILLE	62	465	73	78	515	91	64	471	76	74	492	89	76	388	92	64	421	77	72	405	86
CANDLEWOOD	56	445	62	60	471	70	61	461	70	61	453	71	60	356	70	61	412	70	61	386	71
CANNON ROAD	68	485	81	73	503	87	63	468	74	70	481	85	66	367	79	61	414	71	65	392	77
CARDEROCK SP.	71	496	85	78	516	92	72	492	85	78	505	92	84	406	97	77	447	91	84	426	96
CASHELL	60	456	68	75	507	89	63	466	73	70	482	86	66	365	77	57	405	63	62	387	72
CEDAR GROVE	62	463	72	70	494	83	65	472	76	69	477	84	65	369	80	63	417	74	66	395	79
CHEVY CHASE	61	461	71	62	475	72	67	479	79	65	466	79	68	372	82	62	414	71	67	395	79
CLARKSBURG	55	440	60	60	469	68	60	458	68	61	454	72	56	348	62	61	413	71	59	383	68
CLOVERLY	58	449	65	64	479	75	57	452	65	62	455	72	58	352	66	61	413	71	61	385	70
COLD SPRING	70	489	83	82	525	94	74	500	87	82	515	94	81	398	95	78	450	92	82	424	95
COLLEGE GARDEN	65	474	77	68	489	80	65	473	77	68	475	83	72	380	87	71	434	85	73	408	88
CONGRESSIONAL	57	446	63	77	513	91	70	487	83	76	499	91	82	402	96	70	433	85	78	418	93
CONNECTICUT PK.	60	456	68	79	518	92	62	466	73	73	488	88	59	354	68	58	407	65	60	383	68
CRESTHAVEN	63	468	74	70	495	83	72	493	85	72	487	87	77	386	91	66	423	78	74	406	87
DAMASCUS ES	69	489	83	82	525	94	69	486	82	79	507	92	69	374	84	65	422	78	69	399	82
DARNESTOWN	65	472	76	66	483	77	64	470	75	66	467	79	74	380	87	64	420	76	70	401	84
DIAMOND	64	469	75	76	508	89	64	471	76	72	487	87	63	362	75	65	421	77	65	393	77
DUFIEF	64	469	75	67	486	79	66	476	78	68	475	83	67	368	79	64	420	76	67	396	80
E. SILVER SPRING	48	417	47	47	437	45	50	430	50	48	414	45	45	328	43	46	381	42	45	359	42
FAIRLAND	59	453	67	72	499	85	64	470	75	70	479	85	65	367	79	60	410	68	64	391	76
FALLSMEAD	65	474	77	70	494	83	67	480	80	71	482	86	70	373	83	71	434	85	72	403	85
FARMLAND	68	484	81	85	532	95	72	493	85	82	518	94	75	387	91	69	431	83	75	410	89
FIELDS ROAD	58	449	65	66	484	78	58	454	66	63	459	75	64	364	76	63	416	73	65	392	77
FLOWER VALLEY	64	469	75	75	507	89	66	476	78	73	488	88	69	374	84	67	425	80	70	401	84
FOREST GROVE	67	481	80	73	502	87	69	485	82	72	487	87	67	366	78	64	420	76	66	394	78
FOREST KNOLLS	64	469	75	71	498	85	62	465	72	68	475	83	69	373	83	64	420	76	67	398	81
FOUR CORNERS	51	426	52	66	485	78	59	458	68	64	461	76	69	374	84	66	423	78	69	399	82
FOX CHAPEL	55	440	60	63	477	73	57	451	64	61	454	72	62	359	72	59	408	66	61	386	71
GAITHERSBURG ES	60	456	68	61	471	70	54	441	57	58	443	65	60	356	70	59	408	66	60	384	69
GALWAY	61	460	70	69	492	82	58	453	65	64	462	77	66	367	79	60	412	70	64	392	77

TABLE 1 (continued)

CALIFORNIA ACHIEVEMENT TESTS RESULTS BY SCHOOL
FALL, 1981 THIRD GRADE RESULTS

SCHOOL	SCHOOL #	# TESTED	TOTAL BATTERY NCE MEAN	TOTAL BATTERY SS MEAN	TOTAL BATTERY PER RANK	PHONICS ANALYSIS NCE MEAN	PHONICS ANALYSIS SS MEAN	PHONICS ANALYSIS PER RANK	STRUCTURAL ANALYSIS NCE MEAN	STRUCTURAL ANALYSIS SS MEAN	STRUCTURAL ANALYSIS PER RANK	READING VOCABULARY NCE MEAN	READING VOCABULARY SS MEAN	READING VOCABULARY PER RANK	READING COMPREHENSION NCE MEAN	READING COMPREHENSION SS MEAN	READING COMPREHENSION PER RANK	TOTAL READING NCE MEAN	TOTAL READING SS MEAN	TOTAL READING PER RANK
GARRETT PARK	204	30	66	405	79	52	388	54	61	409	70	63	423	75	62	434	72	60	404	68
GEORGETOWN HILL	221	41	81	435	94	70	439	83	76	453	90	74	449	88	77	473	90	81	462	93
GEORGIAN FOREST	786	23	69	411	83	59	407	67	66	425	79	60	414	69	58	423	65	61	409	71
GERMANTOWN	102	64	70	413	84	59	408	67	70	436	84	63	421	73	62	434	72	65	418	77
GLEN HAVEN	767	54	55	384	60	48	379	48	57	399	64	56	404	62	56	416	60	54	387	56
GLENALLAN	817	27	54	381	56	49	379	48	55	393	60	54	399	58	56	419	62	52	384	54
GREENWOOD	512	64	67	407	80	62	417	73	66	424	79	63	421	73	62	433	71	67	422	79
HARMONY HILLS	797	33	54	381	56	52	389	55	58	403	67	53	397	56	51	405	53	54	390	58
HIGHLAND	774	62	52	379	54	49	381	50	48	377	49	53	397	56	54	412	58	52	383	53
HUNGERFORD PK.	214	51	63	400	75	54	396	60	63	416	74	55	402	60	57	419	62	58	398	64
JACKSON ROAD	305	61	67	407	80	57	402	64	63	414	73	63	421	73	66	444	77	64	414	74
KEMP MILL	805	46	81	445	96	65	425	77	72	442	87	69	436	82	65	442	76	72	437	86
KENSINGTON	751	20	74	420	88	58	404	65	70	435	84	62	420	73	64	440	75	65	418	77
LAKE NORMANDY	231	29	74	420	88	64	422	75	69	433	83	70	438	83	75	467	88	73	439	86
LAKEWOOD	209	36	80	432	93	71	443	85	72	440	86	72	445	86	67	447	79	75	445	89
LAYTONSVILLE	51	69	62	397	72	58	406	66	62	413	73	66	428	78	63	435	72	64	418	77
LONE OAK	205	43	55	384	60	53	393	58	61	411	72	59	412	67	59	426	67	55	402	67
LUXMANOR	220	35	73	421	88	62	418	73	65	421	77	67	431	79	69	451	81	69	428	82
LYNNBROOK	409	15	58	390	66	54	394	58	59	404	67	60	414	69	61	430	69	59	401	66
MARYVALE	210	46	45	364	39	43	364	38	46	370	44	41	367	34	47	394	45	44	363	39
MEADOW HALL	212	39	54	382	57	53	390	56	57	399	64	53	398	57	56	419	62	56	393	60
MILL CREEK TOWNE	556	72	70	415	85	62	416	72	68	431	82	63	420	73	62	432	70	66	422	79
MONOCACY	652	25	52	378	53	47	376	46	43	359	36	53	398	57	52	406	53	49	375	48
MONTROSE	225	12	68	408	81	51	387	54	63	416	74	53	396	56	53	409	55	55	392	60
NEW HAMPSHIRE E.	791	32	57	389	65	49	381	50	65	421	77	53	397	56	55	416	60	55	391	59
N. CHEVY CHASE	415	40	66	406	79	57	404	65	59	404	67	64	423	75	65	440	75	63	413	74
OAK VIEW	766	29	59	392	67	58	405	66	59	405	68	52	394	54	57	421	64	57	396	64
OAKLAND TERRACE	769	47	60	394	69	53	390	56	57	399	64	60	414	69	58	424	65	58	399	65
OLNEY	502	55	65	404	78	54	393	58	69	432	83	61	417	71	62	435	72	63	412	73
PAGE	312	45	56	386	62	51	387	54	55	394	61	55	401	59	60	427	67	56	393	60
PARKWOOD	783	34	58	391	67	54	394	58	56	396	62	60	415	69	56	418	62	58	400	65
PINE CREST	761	48	68	408	81	63	420	74	67	426	80	64	424	75	66	444	77	68	426	81
PLEASANT VIEW	765	28	55	382	57	54	395	59	47	372	45	62	418	71	58	423	65	56	395	62
POOLESVILLE ES	153	79	58	388	64	52	389	55	53	389	57	57	407	64	59	425	66	56	394	61
POTOMAC	601	55	68	408	81	58	407	67	62	411	72	65	427	77	65	442	76	65	417	76
RADNOR	416	8	66	404	78	61	413	70	59	404	67	63	422	74	62	433	71	64	418	77
RITCHIE PARK	227	56	77	428	91	62	415	72	70	435	84	73	447	87	69	452	81	72	436	85
ROCK CREEK FOR.	773	45	65	404	78	52	389	55	61	409	70	62	419	72	59	426	67	59	402	67
ROCK CREEK PAL.	795	38	72	419	87	59	409	68	66	424	79	64	424	75	65	442	76	67	423	79
ROCK CREEK VAL.	819	47	72	418	87	58	406	66	64	419	76	66	430	79	59	426	67	63	414	74
ROCKING HORSE	785	50	56	385	61	54	393	58	55	394	61	54	400	59	53	409	55	54	390	58
ROLLING TERRACE	771	31	56	387	63	52	388	54	60	406	69	51	392	53	55	416	60	55	393	60
ROLLINGWOOD	411	25	74	421	88	59	409	68	69	432	83	70	438	83	69	453	82	68	426	81
ROSEMONT	555	42	55	383	58	43	365	39	59	404	67	49	387	49	51	405	53	50	377	49
SADDLEBROOK	821	42	64	402	76	55	396	60	61	409	70	62	420	73	64	438	74	62	411	72
SEVEN LOCKS	603	31	71	414	85	58	404	65	61	409	70	70	438	83	70	454	82	66	421	78
SHERWOOD ES	501	48	64	401	75	57	402	64	62	411	72	64	424	75	61	432	70	62	411	72

TABLE 1 (continued)

CALIFORNIA ACHIEVEMENT TESTS RESULTS BY SCHOOL
FALL, 1981 THIRD GRADE RESULTS

SCHOOL	SPELLING NCE MEAN	SPELLING SS MEAN	SPELLING PER RANK	LANGUAGE MECHANICS NCE MEAN	LANGUAGE MECHANICS SS MEAN	LANGUAGE MECHANICS PER RANK	LANGUAGE EXPRESSION NCE MEAN	LANGUAGE EXPRESSION SS MEAN	LANGUAGE EXPRESSION PER RANK	TOTAL LANGUAGE NCE MEAN	TOTAL LANGUAGE SS MEAN	TOTAL LANGUAGE PER RANK	MATH COMPUTATION NCE MEAN	MATH COMPUTATION SS MEAN	MATH COMPUTATION PER RANK	MATH CONC & APP NCE MEAN	MATH CONC & APP SS MEAN	MATH CONC & APP PER RANK	TOTAL MATH NCE MEAN	TOTAL MATH SS MEAN	TOTAL MATH PER RANK
GARRETT PARK	63	467	74	68	488	80	68	482	81	59	478	84	63	360	73	67	425	80	66	393	77
GEORGETOWN HILL	70	491	83	78	514	91	80	517	93	83	519	95	72	380	87	77	448	91	76	412	91
GEORGIAN FOREST	60	458	69	66	485	78	63	466	73	66	467	79	81	395	94	61	413	71	73	405	86
GERMANTOWN	66	477	78	78	514	91	66	476	78	75	494	89	73	380	87	64	418	75	70	401	84
GLEN HAVEN	58	451	66	55	456	59	52	437	55	54	432	57	61	357	70	52	393	52	57	378	63
GLENALLAN	51	429	54	60	469	68	57	451	64	59	448	68	50	337	52	55	399	58	53	372	57
GREENWOOD	62	463	72	69	491	81	64	470	75	68	473	82	60	356	70	67	425	80	64	391	76
HARMONY HILLS	53	434	56	62	475	72	53	441	57	58	445	66	51	339	54	54	397	56	53	371	56
HIGHLAND	52	429	54	52	450	55	51	433	52	52	427	53	53	344	59	51	391	51	52	371	56
HUNGERFORD PK.	56	443	61	61	473	71	59	456	67	61	455	72	71	376	85	60	411	69	66	395	79
JACKSON ROAD	64	469	75	65	482	76	63	467	73	65	465	78	64	362	75	67	426	80	66	395	79
KEMP MILL	69	488	82	84	529	95	74	499	87	82	518	94	87	414	98	77	452	92	84	432	97
KENSINGTON	69	488	82	74	505	88	67	480	80	73	490	88	75	383	89	71	434	85	75	408	88
LAKE NORMANDY	65	474	77	66	484	78	73	497	86	71	482	86	70	373	83	72	437	87	73	405	86
LAKEWOOD	72	497	85	74	505	88	69	486	82	74	491	89	81	395	94	72	436	86	79	415	92
LAYTONSVILLE	56	444	62	68	490	81	63	468	74	67	471	81	53	343	58	60	411	69	58	380	65
LONE OAK	60	456	68	62	473	71	59	456	67	62	455	72	47	333	48	52	394	53	50	368	52
LUXMANOR	62	464	72	75	507	89	73	497	86	77	501	91	71	376	85	70	434	85	72	405	86
LYNNBROOK	62	464	72	54	454	57	64	471	76	59	445	66	61	357	70	60	410	68	60	385	70
MARYVALE	45	407	41	47	436	44	43	411	36	44	404	38	46	329	44	49	386	46	47	362	45
MEADOW HALL	54	438	59	57	463	64	55	445	60	57	440	62	46	329	44	56	402	61	52	370	55
MILL CREEK TOWNE	58	451	66	68	489	80	65	474	77	68	475	83	73	381	88	66	424	79	71	404	84
MONOCACY	49	421	49	64	478	74	51	433	52	58	442	64	49	336	51	52	392	52	50	368	52
MONTROSE	53	435	57	81	523	93	59	458	68	72	488	88	73	378	86	74	440	88	74	407	88
NEW HAMPSHIRE E.	52	431	55	67	487	79	56	449	63	62	457	74	54	344	59	57	403	62	56	377	62
N. CHEVY CHASE	60	456	68	64	479	75	63	468	74	65	466	79	63	361	74	67	426	80	67	395	79
OAK VIEW	64	470	75	52	450	55	58	455	67	55	438	61	65	363	75	57	405	63	62	386	71
OAKLAND TERRACE	54	438	59	61	471	70	60	458	68	61	452	71	60	354	68	61	413	71	61	386	71
OLNEY	58	452	66	67	486	79	63	469	75	67	471	81	66	367	79	62	414	71	65	392	77
PAGE	55	441	60	56	459	61	44	415	39	49	420	49	59	354	68	57	405	63	59	383	68
PARKWOOD	54	436	58	58	464	65	60	460	70	60	450	69	52	342	57	59	409	67	56	378	63
PINE CREST	69	487	82	70	494	83	63	468	74	68	475	83	62	358	71	64	420	76	64	390	75
PLEASANT VIEW	60	457	69	61	471	70	52	434	52	56	439	62	48	333	48	55	400	59	52	371	56
POOLESVILLE ES	57	447	64	60	470	69	58	453	65	60	448	68	56	349	63	57	405	63	57	379	64
POTOMAC	62	464	72	68	488	80	67	478	79	69	475	83	69	373	83	63	416	73	67	396	80
RADNOR	59	452	66	67	486	79	63	468	74	66	469	80	64	362	75	66	422	78	66	393	77
RITCHIE PARK	69	485	81	79	518	92	74	499	87	80	511	93	72	378	86	74	442	89	74	409	89
ROCK CREEK FOR.	57	446	63	59	468	68	61	463	71	61	453	71	73	380	87	66	423	78	70	402	84
ROCK CREEK PAL.	67	480	79	73	501	86	65	475	77	71	484	86	74	383	89	67	425	80	72	405	86
ROCK CREEK VAL.	59	452	66	71	498	85	64	471	76	69	479	85	80	393	94	72	437	87	78	414	92
ROCKING HORSE	57	447	64	65	483	77	58	454	66	63	459	75	47	334	49	56	402	61	53	372	57
ROLLING TERRACE	50	425	51	67	488	80	54	444	60	62	457	74	51	340	55	53	395	54	54	372	57
ROLLINGWOOD	62	463	72	74	505	88	75	503	88	77	500	91	68	370	81	71	435	86	72	404	86
ROSEMONT	49	419	48	70	494	83	57	450	64	65	466	79	59	353	67	53	395	54	56	377	62
SADDLEBROOK	61	462	71	66	485	78	61	463	71	66	468	80	60	355	69	64	421	77	63	389	74
SEVEN LOCKS	60	456	68	66	484	78	73	498	87	71	481	85	69	371	82	73	439	87	72	404	86
SHERWOOD ES	60	458	69	73	501	86	62	466	73	69	477	84	62	359	72	59	408	66	62	387	72

TABLE 1 (continued)

CALIFORNIA ACHIEVEMENT TESTS RESULTS BY SCHOOL
FALL, 1981 THIRD GRADE RESULTS

SCHOOL	SCHOOL #	# TESTED	TOTAL BATTERY NCE MEAN	TOTAL BATTERY SS MEAN	TOTAL BATTERY PER RANK	PHONICS & ANALYSIS NCE MEAN	PHONICS & ANALYSIS SS MEAN	PHONICS & ANALYSIS PER RANK	STRUCTURAL ANALYSIS NCE MEAN	STRUCTURAL ANALYSIS SS MEAN	STRUCTURAL ANALYSIS PER RANK	READING VOCABULARY NCE MEAN	READING VOCABULARY SS MEAN	READING VOCABULARY PER RANK	READING COMPREHENSION NCE MEAN	READING COMPREHENSION SS MEAN	READING COMPREHENSION PER RANK	TOTAL READING NCE MEAN	TOTAL READING SS MEAN	TOTAL READING PER RANK
SOMERSET	405	28	81	432	93	65	426	77	75	448	39	72	445	86	72	460	85	75	444	88
SOUTH LAKE	564	58	58	389	65	48	378	48	50	380	51	54	400	59	58	422	64	53	385	55
STEDWICK	568	80	62	397	72	51	386	53	62	413	73	63	422	74	62	433	71	60	405	69
STONEGATE	316	37	70	412	83	60	412	70	63	416	74	66	430	79	66	444	77	66	422	79
STRATHMORE	822	26	55	384	60	55	397	60	58	402	66	50	389	50	53	409	55	54	388	57
SUMMIT HALL	563	49	64	401	75	53	391	56	70	435	84	56	403	61	60	428	68	60	403	67
TAKOMA PARK ES	754	100	53	379	54	49	381	50	54	390	58	53	396	56	55	415	60	54	389	58
TRAVILAH	216	37	61	396	71	58	407	67	58	403	67	61	417	71	62	433	71	62	410	72
TWINBROOK	206	55	53	380	55	49	381	50	53	388	57	52	394	54	53	408	55	52	383	53
VIERS MILL	772	49	56	386	62	54	394	58	56	397	63	54	399	58	54	413	58	55	392	60
WASHINGTON GROVE	552	51	55	384	60	50	382	50	54	390	58	58	408	65	56	417	61	54	389	58
WATKINS MILL	561	67	69	413	84	55	396	60	62	413	73	62	419	72	60	428	68	60	405	69
WAYSIDE	235	51	72	419	87	65	425	77	69	432	83	71	441	84	66	443	77	70	432	84
WELLER ROAD	777	72	59	391	67	55	398	61	56	396	62	56	405	62	49	398	48	53	386	55
WEST ROCKVILLE	207	29	61	397	72	54	395	59	63	416	74	56	405	62	64	438	74	60	406	69
WESTBROOK	408	38	74	421	88	67	431	80	69	433	83	71	442	85	71	457	84	75	444	88
WESTOVER	504	35	63	399	74	57	404	65	57	399	64	59	411	67	61	430	69	61	409	71
WHEATON WOODS	788	48	56	386	62	49	381	50	55	394	61	52	395	55	54	413	58	54	388	57
WHETSTONE	558	67	65	405	79	56	400	62	63	416	74	65	426	76	64	439	75	64	416	75
WOOD ACRES	417	31	74	423	89	65	425	77	67	426	80	73	446	86	70	456	83	72	438	86
WOODFIELD	704	53	69	411	83	61	414	71	67	426	80	67	432	80	63	436	73	66	422	79
WOODLIN	764	43	57	386	62	52	390	56	55	394	61	57	407	64	58	421	64	58	399	65
WYNGATE	422	76	71	414	85	64	423	76	67	427	80	71	441	84	69	453	82	71	434	84

TABLE 1 (continued)

CALIFORNIA ACHIEVEMENT TESTS RESULTS BY SCHOOL
FALL, 1981 THIRD GRADE RESULTS

SCHOOL	SPELLING NCE MEAN	SPELLING SS MEAN	SPELLING PER RANK	LANGUAGE MECHANICS NCE MEAN	LANGUAGE MECHANICS SS MEAN	LANGUAGE MECHANICS PER RANK	LANGUAGE EXPRESSION NCE MEAN	LANGUAGE EXPRESSION SS MEAN	LANGUAGE EXPRESSION PER RANK	TOTAL LANGUAGE NCE MEAN	TOTAL LANGUAGE SS MEAN	TOTAL LANGUAGE PER RANK	MATH COMPUTATION NCE MEAN	MATH COMPUTATION SS MEAN	MATH COMPUTATION PER RANK	MATH CONC & APP NCE MEAN	MATH CONC & APP SS MEAN	MATH CONC & APP PER RANK	TOTAL MATH NCE MEAN	TOTAL MATH SS MEAN	TOTAL MATH PER RANK
SOMERSET	69	488	82	70	496	84	72	494	85	73	488	88	81	397	95	75	442	85	81	420	94
SOUTH LAKE	55	439	59	57	461	63	55	445	60	56	439	62	60	354	68	62	415	72	62	387	72
STEDWICK	58	448	64	60	468	68	61	461	70	61	454	72	62	360	73	61	412	70	63	388	73
STONEGATE	71	495	85	68	490	81	65	473	77	68	475	83	67	369	80	67	425	80	69	398	81
STRATHMORE	52	430	54	53	451	55	49	429	49	51	424	51	60	354	68	54	399	58	58	380	65
SUMMIT HALL	59	453	67	74	505	88	63	467	73	70	481	85	63	361	74	62	414	71	64	390	75
TAKOMA PARK ES	52	429	54	52	449	54	53	440	57	53	430	55	52	340	55	51	389	49	50	368	52
TRAVILAH	62	464	72	56	460	62	61	461	70	59	447	67	57	349	63	63	416	73	61	385	70
TWINBROOK	51	426	52	53	452	56	52	437	55	53	431	56	54	344	59	52	394	53	53	372	57
VIERS MILL	57	449	65	62	474	72	53	441	57	59	447	67	56	349	63	51	392	52	54	374	59
WASHINGTON GROVE	51	427	53	64	479	75	56	448	62	60	451	70	52	340	55	55	401	60	54	374	59
WATKINS MILL	56	442	61	74	504	87	62	466	73	70	479	85	76	388	92	67	426	80	74	408	88
WAYSIDE	68	486	82	76	510	90	68	482	81	74	493	89	67	369	80	67	424	79	68	398	81
WELLER ROAD	61	460	70	62	475	72	54	444	60	59	447	67	60	356	70	60	411	69	62	386	71
WEST ROCKVILLE	55	441	60	65	482	76	66	476	78	67	471	81	54	348	62	60	410	68	58	382	67
WESTBROOK	63	467	74	77	512	90	76	504	89	79	509	93	65	363	75	75	444	89	71	402	84
WESTOVER	56	444	62	65	481	76	62	465	72	64	462	77	64	363	75	61	413	71	64	389	74
WHEATON WOODS	55	441	60	71	497	84	53	438	55	63	457	74	54	344	59	54	399	58	55	375	60
WHETSTONE	63	466	73	72	501	86	62	466	73	69	479	85	57	350	64	64	419	75	62	387	72
WOOD ACRES	68	484	81	69	492	82	74	498	87	73	489	88	70	377	86	71	435	86	72	407	88
WOODFIELD	60	459	70	75	508	89	62	464	72	70	480	85	71	375	84	64	419	75	69	398	81
WOODLIN	60	458	69	63	476	73	56	448	62	60	451	70	49	335	50	56	402	61	53	372	57
WYNGATE	67	479	79	70	493	82	72	493	85	72	488	88	65	365	77	69	429	82	68	397	81

TABLE 2

CALIFORNIA ACHIEVEMENT TESTS RESULTS BY SCHOOL
FALL, 1981 FIFTH GRADE RESULTS

SCHOOL	SCHOOL #	# TESTED	TOTAL BATTERY NCE MEAN	TOTAL BATTERY SS MEAN	TOTAL BATTERY PER RANK	READING VOCABULARY NCE MEAN	READING VOCABULARY SS MEAN	READING VOCABULARY PER RANK	READING COMPREHENSION NCE MEAN	READING COMPREHENSION SS MEAN	READING COMPREHENSION PER RANK	TOTAL READING NCE MEAN	TOTAL READING SS MEAN	TOTAL READING PER RANK	SPELLING NCE MEAN	SPELLING SS MEAN	SPELLING PER RANK
ARCOLA	790	21	62	479	71	52	464	53	57	494	64	55	472	59	53	510	5e
ASHBURTON	425	58	65	488	77	65	503	78	63	513	74	64	502	77	58	528	65
AYRLAWN	421	22	68	497	82	65	502	78	67	524	79	66	508	80	52	509	55
BANNOCKBURN	420	39	70	497	82	70	515	84	69	530	81	70	520	95	65	554	77
BARNSLEY	505	85	73	511	89	68	508	81	67	526	80	68	513	82	66	558	78
BELLS MILL	607	45	75	513	90	69	513	83	69	532	82	70	519	85	71	576	85
BELMONT	513	68	73	507	87	67	508	81	67	526	80	68	513	82	62	544	73
BEL PRE	780	41	67	494	81	61	490	71	60	503	69	61	491	71	57	526	64
BETHESDA	401	49	75	511	89	70	516	84	70	534	83	70	520	85	66	558	78
BEVERLY FARMS	226	59	75	514	90	69	512	82	70	536	84	71	523	86	64	552	76
BRADLEY	410	34	79	524	93	76	531	89	73	544	87	75	535	90	73	583	87
BROAD ACRES	304	30	49	450	48	51	464	53	49	467	48	49	457	49	51	506	53
BROOKHAVEN	807	78	66	490	78	63	495	74	61	507	71	62	496	74	62	544	73
BROOKMONT	414	28	75	509	88	70	514	83	70	536	84	71	522	86	68	564	81
BROOKVIEW	307	46	53	458	55	47	453	45	48	466	47	48	452	46	53	513	57
BROWN STATION	559	77	69	497	82	66	503	78	65	518	76	66	506	79	61	539	70
BURNING TREE	419	94	82	531	95	75	529	88	74	548	88	75	539	91	70	573	84
BURTONSVILLE	302	44	66	489	78	60	486	69	61	507	71	61	491	71	59	531	66
CANDLEWOOD	508	71	73	506	87	68	509	81	67	527	80	69	515	83	65	556	78
CANNON ROAD	310	49	70	501	84	65	502	78	65	521	78	66	506	79	61	539	70
CARDEROCK SP.	604	41	72	504	86	68	508	81	67	526	80	68	513	82	66	557	78
CASHELL	511	89	68	495	81	66	503	78	65	520	77	66	508	80	60	538	70
CEDAR GROVE	703	32	71	504	86	65	502	78	67	527	80	67	511	81	64	551	76
CHEVY CHASE	403	72	70	500	84	65	501	77	64	514	74	64	502	77	66	558	78
CLARKSBURG	101	36	57	469	63	59	486	69	54	485	58	56	479	64	54	515	58
CLOVERLY	308	63	67	492	79	64	498	76	62	510	72	63	499	76	60	535	68
COLD SPRING	238	74	76	513	90	70	514	83	69	530	81	70	519	85	68	566	81
COLLEGE GARDEN	229	89	69	497	82	64	500	77	69	531	82	68	512	82	61	539	70
CONGRESSIONAL	218	32	62	481	72	54	472	59	57	495	64	56	476	62	59	532	67
CONNECTICUT PK.	779	38	64	486	76	61	490	71	63	513	74	63	497	75	60	536	69
CRESTHAVEN	808	44	67	493	80	66	509	81	66	523	78	67	513	82	60	537	69
DAMASCUS ES	702	72	65	488	77	61	491	72	61	506	70	61	492	72	59	534	68
DARNESTOWN	351	63	76	517	91	68	509	81	70	536	84	70	520	85	66	559	79
DIAMOND	570	96	71	503	85	66	503	78	65	519	77	66	507	80	61	541	71
DUFIEF	241	74	70	500	84	66	503	78	63	514	74	65	502	77	60	538	70
FAIRLAND	303	84	65	487	76	66	503	78	62	508	71	64	499	76	61	538	70
FALLSMEAD	233	65	73	509	88	70	513	83	69	531	82	70	519	85	66	558	78
FARMLAND	219	47	80	526	94	73	522	86	73	543	86	74	530	88	70	571	83
FIELDS ROAD	566	49	64	486	76	62	493	73	66	524	79	65	503	78	62	545	73
FLOWER VALLEY	506	94	66	492	79	64	499	76	65	520	77	65	505	79	59	533	67
FOREST GROVE	768	23	71	503	85	67	506	80	63	514	74	65	505	79	63	546	73
FOREST KNOLLS	803	43	65	487	76	65	500	77	59	499	66	62	493	72	56	521	61
FOUR CORNERS	763	51	69	500	84	67	506	80	68	530	81	68	515	83	53	512	57
FOX CHAPEL	106	79	66	492	79	61	489	71	61	507	71	61	493	72	63	548	74
GAITHERSBURG ES	553	82	63	482	73	58	483	67	61	508	71	60	491	71	54	513	57
GALWAY	313	38	68	493	80	63	496	75	65	519	77	65	503	78	68	568	82
GARRETT PARK	204	27	68	496	82	65	501	77	65	522	78	66	507	80	62	544	73

TABLE 2 (continued)

CALIFORNIA ACHIEVEMENT TESTS RESULTS BY SCHOOL
FALL, 1981 FIFTH GRADE RESULTS

SCHOOL	LANGUAGE MECHANICS			LANGUAGE EXPRESSION			TOTAL LANGUAGE			MATH COMPUTATION			MATH CONC & APP			TOTAL MATH			REFERENCE SKILLS		
	NCE MEAN	SS MEAN	PER RANK	NCE MEAN	SS MEAN	PER RANK	NCE MEAN	SS MEAN	PER RANK	NCE MEAN	SS MEAN	PER RANK	NCE MEAN	SS MEAN	PER RANK	NCE MEAN	SS MEAN	PER RANK	NCE MEAN	SS MEAN	PER RANK
ARCOLA	57	527	64	62	533	75	61	523	70	63	469	74	68	496	80	67	482	78	69	539	83
ASHBURTON	62	542	73	66	544	80	66	539	79	59	457	65	65	490	76	63	474	73	63	520	74
AYRLAWN	68	559	81	72	560	86	73	558	87	65	476	78	66	497	81	67	488	82	69	538	82
BANNOCKBURN	63	545	74	70	557	85	69	545	82	61	463	70	67	495	80	65	479	76	71	544	85
BARNSLEY	75	579	89	73	564	87	76	572	91	71	488	84	72	509	87	73	499	88	70	541	84
BELLS MILL	82	598	93	72	560	86	79	579	93	73	493	87	67	496	80	72	493	85	71	544	85
BELMONT	81	595	93	72	563	87	79	580	93	65	474	77	73	511	88	70	491	84	72	547	86
BEL PRE	69	560	82	68	548	82	70	551	84	69	485	83	67	495	80	70	489	82	70	539	83
BETHESDA	71	566	84	75	571	89	76	569	90	69	482	81	74	514	89	73	497	87	70	541	84
BEVERLY FARMS	74	576	88	70	555	85	74	565	89	71	488	84	75	515	89	75	501	89	72	548	86
BRADLEY	78	589	91	76	574	90	79	584	94	71	492	86	75	516	90	75	504	90	72	547	86
BROAD ACRES	55	520	60	52	502	55	54	502	57	48	432	47	46	446	43	47	439	45	52	487	55
BROOKHAVEN	71	569	85	65	540	79	70	551	84	64	471	75	61	481	70	64	476	74	64	521	75
BROOKMONT	69	562	83	75	570	89	75	563	89	70	486	83	71	505	85	73	495	86	71	544	85
BROOKVIEW	58	530	66	50	497	51	54	503	57	62	465	71	51	458	52	56	459	62	52	488	56
BROWN STATION	66	552	78	68	549	82	69	546	82	68	481	81	69	501	83	69	490	83	68	534	81
BURNING TREE	79	590	92	78	583	92	82	589	95	76	503	91	80	531	94	80	517	55	76	557	89
BURTONSVILLE	68	558	81	69	553	84	71	552	85	59	459	67	66	493	78	63	477	75	68	534	81
CANDLEWOOD	68	559	81	69	553	84	71	554	86	67	479	80	74	511	88	72	494	85	69	537	82
CANNON ROAD	72	570	86	70	557	85	74	563	89	63	469	74	69	503	84	68	486	81	66	530	79
CARDEROCK SP.	69	560	82	70	555	85	72	555	86	67	479	80	71	505	85	70	490	83	67	532	80
CASHELL	63	543	73	65	540	79	66	536	77	68	481	81	64	488	75	67	485	80	63	519	74
CEDAR GROVE	67	555	79	74	571	89	73	560	88	68	482	81	70	502	83	71	491	84	68	534	81
CHEVY CHASE	69	563	83	69	552	83	71	559	87	68	481	81	66	494	79	68	486	81	65	525	77
CLARKSBURG	63	545	74	60	524	70	63	530	74	51	439	52	55	467	60	53	453	57	60	513	71
CLOVERLY	72	569	85	66	542	80	70	552	85	62	466	72	65	491	77	65	478	75	71	545	85
COLD SPRING	75	578	88	75	572	89	78	576	92	67	477	78	75	517	90	73	495	86	71	544	85
COLLEGE GARDEN	66	553	78	67	546	81	68	546	82	64	471	75	69	500	82	67	485	80	68	534	81
CONGRESSIONAL	63	544	74	59	520	68	62	524	71	67	477	78	63	485	73	65	480	77	62	515	72
CONNECTICUT PK.	62	542	73	62	531	74	63	529	74	65	473	76	62	483	72	64	477	75	69	537	82
CRESTHAVEN	72	568	85	67	545	81	70	552	85	63	468	73	64	487	75	64	477	75	67	531	80
DAMASCUS ES	67	554	79	63	534	76	67	540	79	62	467	72	65	493	78	65	478	75	63	521	75
DARNESTOWN	76	582	90	72	561	86	76	572	91	75	501	90	75	514	89	77	507	91	71	544	85
DIAMOND	68	557	80	67	547	82	69	549	84	68	480	80	74	511	88	73	496	86	73	550	87
DUFIEF	67	556	80	67	546	81	69	548	83	73	492	86	69	500	82	72	495	86	65	527	78
FAIRLAND	62	541	72	67	545	81	66	537	78	65	472	75	60	478	68	63	474	73	64	523	76
FALLSMEAD	73	572	86	72	562	87	75	565	89	66	478	79	71	507	86	70	493	85	72	545	85
FARMLAND	80	593	92	74	568	88	80	581	93	78	506	92	77	520	91	80	513	94	76	558	89
FIELDS ROAD	64	547	75	66	543	80	67	540	79	57	454	63	61	481	70	60	468	68	67	531	80
FLOWER VALLEY	71	566	84	68	549	82	71	554	86	60	463	70	63	487	75	63	476	74	66	528	78
FOREST GROVE	72	571	86	66	544	80	71	555	86	69	483	82	69	499	82	71	491	84	63	520	74
FOREST KNOLLS	67	556	80	63	533	75	67	539	79	63	469	74	64	490	76	65	479	76	67	534	81
FOUR CORNERS	63	543	73	70	555	85	68	546	82	68	480	80	71	506	86	71	493	85	66	527	78
FOX CHAPEL	67	556	80	63	534	76	66	541	80	65	475	77	64	489	76	66	482	78	64	522	75
GAITHERSBURG ES	62	540	72	66	542	80	65	536	77	57	455	64	64	490	76	62	472	71	64	523	76
GALWAY	67	556	80	67	545	81	69	547	83	60	463	70	64	489	76	64	475	73	67	532	80
GARRETT PARK	64	546	75	68	549	82	68	543	81	62	468	73	68	501	83	66	486	81	65	525	77

TABLE 2 (continued)

CALIFORNIA ACHIEVEMENT TESTS RESULTS BY SCHOOL
FALL, 1981 FIFTH GRADE RESULTS

SCHOOL	SCHOOL #	# TESTED	TOTAL BATTERY NCE MEAN	TOTAL BATTERY SS MEAN	TOTAL BATTERY PER RANK	READING VOCABULARY NCE MEAN	READING VOCABULARY SS MEAN	READING VOCABULARY PER RANK	READING COMPREHENSION NCE MEAN	READING COMPREHENSION SS MEAN	READING COMPREHENSION PER RANK	TOTAL READING NCE MEAN	TOTAL READING SS MEAN	TOTAL READING PER RANK	SPELLING NCE MEAN	SPELLING SS MEAN	SPELLING PER RANK
GEORGETOWN HILL	221	66	72	504	86	69	513	83	64	516	75	67	508	80	62	544	73
GEORGIAN FOREST	786	55	70	498	83	63	495	74	64	516	75	64	502	77	61	541	71
GERMANTOWN	102	74	66	491	79	64	497	75	62	510	72	63	497	75	58	528	65
GLEN HAVEN	767	69	56	467	62	57	479	64	55	489	61	56	476	62	52	508	54
GLENALLAN	817	48	62	479	71	57	479	64	58	496	65	58	482	66	56	523	62
GREENWOOD	512	97	66	489	78	67	506	80	62	509	72	65	502	77	63	549	75
HARMONY HILLS	797	67	54	462	58	52	466	55	54	484	58	53	469	57	48	492	46
HIGHLAND	774	86	59	475	68	56	477	63	55	488	60	56	475	61	59	533	67
HIGHLAND VIEW	784	45	60	475	68	58	483	67	59	500	67	59	486	68	56	522	62
HUNGERFORD PK.	214	67	64	485	75	64	497	75	63	511	73	64	499	76	55	517	59
JACKSON ROAD	305	86	67	493	80	65	501	77	64	516	75	64	502	77	58	531	66
KEMP MILL	805	40	71	505	86	66	506	80	65	520	77	66	509	81	64	552	76
KENSINGTON	751	28	75	513	90	63	497	75	67	525	79	66	508	80	64	553	76
LAKE NORMANDY	231	69	76	516	91	72	519	85	72	544	87	73	529	88	70	573	84
LAKEWOOD	209	49	69	498	83	69	513	83	67	527	80	69	516	84	59	534	68
LAYTONSVILLE	51	88	74	511	89	67	506	80	65	519	77	66	507	80	62	544	73
LONE OAK	205	50	56	468	63	59	484	68	55	489	61	57	480	64	52	509	55
LUXMANOR	220	41	82	532	95	75	527	88	74	549	88	76	537	90	68	565	81
LYNNBROOK	409	21	62	481	72	67	505	79	64	518	76	65	506	79	54	516	59
MARYVALE	210	56	45	441	41	46	449	42	45	457	42	45	445	41	45	483	41
MEADOW HALL	212	42	61	478	70	62	492	73	59	499	66	60	489	70	55	520	61
MILL CREEK TOWNE	556	72	66	488	77	61	489	71	59	499	66	60	488	69	61	541	71
MONOCACY	652	33	53	460	56	57	481	66	51	476	53	54	471	58	54	514	58
MONTROSE	225	24	59	473	66	53	468	57	58	498	66	57	477	62	54	515	58
N. CHEVY CHASE	415	40	71	503	85	71	519	85	68	527	80	70	521	85	64	552	76
OAK VIEW	766	83	54	462	58	52	467	56	55	488	60	54	472	59	53	512	57
OAKLAND TERRACE	769	61	63	484	74	65	502	78	62	510	72	64	500	76	55	518	60
OLNEY	502	63	70	500	84	66	504	79	65	521	78	66	508	80	61	541	71
PAGE	312	40	64	486	76	58	483	67	60	505	70	60	488	69	60	538	70
PARKWOOD	783	43	63	483	74	64	499	76	64	518	76	64	502	77	55	518	60
PINE CREST	761	58	57	468	63	57	479	64	58	498	66	58	484	67	55	519	60
PINEY BRANCH	749	122	55	465	60	57	480	65	57	495	64	57	481	65	53	511	56
PLEASANT VIEW	765	29	64	487	76	66	506	80	63	514	74	65	505	79	60	537	69
POOLESVILLE ES	153	82	61	478	70	62	492	73	59	500	67	60	489	70	57	526	64
POTOMAC	601	82	75	514	90	74	526	87	69	533	83	72	525	87	66	556	78
RADNOR	416	15	74	507	87	75	529	88	75	549	88	76	538	90	62	544	73
RITCHIE PARK	227	66	77	516	91	76	530	89	74	547	88	75	537	90	67	559	79
ROCK CREEK FOR.	773	46	67	493	80	66	505	79	66	523	78	67	512	82	56	521	61
ROCK CREEK PAL.	795	47	66	489	78	63	494	74	62	512	73	63	500	76	58	529	65
ROCK CREEK VAL.	819	59	75	513	90	66	504	79	66	524	79	67	511	81	63	547	74
ROCKING HORSE	785	43	53	459	55	51	464	53	53	480	55	52	465	54	52	510	56
ROLLINGWOOD	411	33	71	504	86	73	523	86	68	529	81	71	522	86	68	563	80
ROSEMONT	555	40	58	471	65	55	473	60	58	497	65	57	480	64	56	521	61
SADDLEBROOK	821	41	71	502	85	67	506	80	65	520	77	66	509	81	64	551	76
SEVEN LOCKS	603	45	77	520	92	76	531	89	72	544	87	74	535	90	68	566	81
SHERWOOD ES	501	77	65	487	76	62	492	73	62	510	72	63	496	74	59	534	68
SOMERSET	405	49	79	522	93	75	528	88	74	549	88	75	537	90	67	562	80

TABLE 2 (continued)

CALIFORNIA ACHIEVEMENT TESTS RESULTS BY SCHOOL
FALL, 1981 FIFTH GRADE RESULTS

SCHOOL	LANGUAGE MECHANICS NCE MEAN	LANGUAGE MECHANICS SS MEAN	LANGUAGE MECHANICS PER RANK	LANGUAGE EXPRESSION NCE MEAN	LANGUAGE EXPRESSION SS MEAN	LANGUAGE EXPRESSION PER RANK	TOTAL LANGUAGE NCE MEAN	TOTAL LANGUAGE SS MEAN	TOTAL LANGUAGE PER RANK	MATH COMPUTATION NCE MEAN	MATH COMPUTATION SS MEAN	MATH COMPUTATION PER RANK	MATH CONC & APP NCE MEAN	MATH CONC & APP SS MEAN	MATH CONC & APP PER RANK	TOTAL MATH NCE MEAN	TOTAL MATH SS MEAN	TOTAL MATH PER RANK	REFERENCE SKILLS NCE MEAN	REFERENCE SKILLS SS MEAN	REFERENCE SKILLS PER RANK
GEORGETOWN HILL	72	569	85	69	553	84	73	558	87	67	478	79	75	515	89	73	496	86	73	549	86
GEORGIAN FOREST	69	562	83	63	535	76	68	543	81	71	488	84	68	498	81	71	492	84	72	546	85
GERMANTOWN	63	545	74	60	526	72	63	528	73	70	484	82	67	495	80	70	488	82	65	524	76
GLEN HAVEN	56	525	63	55	509	60	56	508	61	56	451	61	57	471	63	57	461	63	57	503	65
GLENALLAN	63	545	74	62	530	74	64	533	76	60	461	68	60	478	68	60	468	68	61	513	71
GREENWOOD	65	550	77	66	542	80	67	541	80	60	461	68	62	483	72	62	472	71	63	520	74
HARMONY HILLS	56	523	61	55	509	60	56	508	61	53	444	56	57	471	63	55	458	61	58	505	66
HIGHLAND	57	526	63	58	519	67	58	516	66	62	465	71	60	479	69	61	471	71	60	513	71
HIGHLAND VIEW	58	529	65	62	530	74	61	524	71	55	448	59	58	475	66	57	461	63	62	518	73
HUNGERFORD PK.	60	534	68	63	532	75	62	528	73	63	468	73	63	487	75	64	477	75	63	521	75
JACKSON ROAD	64	547	75	68	548	82	68	544	81	64	471	75	66	492	78	66	481	77	67	531	80
KEMP MILL	74	576	88	67	547	82	72	560	88	67	478	79	70	505	85	70	491	84	69	538	82
KENSINGTON	76	581	89	70	557	85	76	569	90	76	502	90	76	517	90	78	509	92	73	548	86
LAKE NORMANDY	70	564	83	75	569	89	75	567	90	69	482	81	75	515	89	73	497	87	75	556	88
LAKEWOOD	68	559	81	72	561	86	72	557	87	62	466	72	66	493	78	65	480	77	64	522	75
LAYTONSVILLE	72	571	86	70	557	85	74	563	89	74	497	88	74	515	89	76	506	91	68	534	81
LONE OAK	54	517	58	57	517	66	56	509	61	58	455	64	55	468	60	57	461	63	59	507	67
LUXMANOR	79	590	92	84	602	95	85	601	96	77	506	92	80	524	93	81	515	54	77	561	90
LYNNBROOK	59	530	66	65	539	78	63	530	74	58	459	67	56	470	62	57	465	66	57	502	64
MARYVALE	51	510	53	46	483	41	48	486	46	46	426	43	46	445	42	45	435	42	50	481	51
MEADOW HALL	64	547	75	62	532	75	64	535	77	56	452	62	58	474	65	58	462	64	60	511	70
MILL CREEK TOWNE	61	538	71	63	532	75	63	529	74	67	478	79	68	497	81	69	486	81	67	532	80
MONOCACY	54	518	58	53	504	57	54	501	56	55	449	60	51	458	52	53	453	57	52	488	56
MONTROSE	63	545	74	62	529	73	63	531	75	58	455	64	58	474	65	58	465	66	61	514	71
N. CHEVY CHASE	68	559	81	70	557	85	71	557	87	62	465	71	70	506	86	67	484	79	69	538	82
OAK VIEW	55	521	60	57	515	65	57	510	62	54	446	58	52	459	53	53	452	56	61	512	70
OAKLAND TERRACE	62	539	71	59	521	69	61	524	71	62	467	72	63	485	73	63	475	73	63	520	74
OLNEY	74	575	87	75	571	89	78	575	92	62	466	72	68	497	81	66	482	78	66	527	78
PAGE	64	545	74	64	538	78	65	535	77	65	473	76	63	484	72	65	478	75	66	529	79
PARKWOOD	63	543	73	68	550	83	68	545	82	52	442	55	62	483	72	57	463	65	65	526	77
PINE CREST	60	535	69	57	516	65	59	519	68	52	442	55	55	467	60	54	454	58	59	507	67
PINEY BRANCH	53	514	56	57	516	65	56	508	61	50	436	50	56	471	63	53	453	57	55	495	60
PLEASANT VIEW	62	540	72	67	547	82	66	538	78	61	462	69	63	487	75	63	475	73	65	527	78
POOLESVILLE ES	60	536	69	63	535	76	63	529	74	56	451	61	61	482	71	60	466	67	65	525	77
POTOMAC	71	568	85	73	566	88	75	565	89	72	492	86	73	509	87	74	500	88	71	545	85
RADNOR	68	557	80	73	566	88	73	560	88	58	457	65	77	517	90	69	486	81	76	559	89
RITCHIE PARK	73	574	87	77	579	91	78	577	92	68	481	81	73	510	87	72	495	86	74	552	87
ROCK CREEK FOR.	66	554	79	66	545	81	68	544	81	63	468	73	64	488	75	64	477	75	67	530	79
ROCK CREEK PAL.	66	553	78	62	528	73	65	536	77	64	472	75	65	491	77	66	480	77	63	522	75
ROCK CREEK VAL.	77	587	91	73	565	88	78	578	93	69	485	83	75	517	90	74	501	89	73	551	87
ROCKING HORSE	56	523	61	52	500	54	54	503	57	52	442	55	53	462	56	53	452	56	53	490	57
ROLLINGWOOD	69	562	83	73	564	87	73	561	88	64	470	74	67	498	81	67	483	79	70	539	83
ROSEMONT	60	536	69	62	531	74	62	528	73	55	449	60	57	472	64	57	460	62	63	520	74
SADDLEBROOK	72	573	87	68	550	83	72	561	88	63	467	72	71	506	86	68	485	80	70	542	84
SEVEN LOCKS	72	570	86	74	567	88	75	567	90	72	491	86	78	524	93	76	507	91	75	557	89
SHERWOOD ES	65	550	77	65	539	78	66	540	79	66	477	78	59	476	67	63	475	73	63	519	74
SOMERSET	71	568	85	75	571	89	75	569	90	74	495	88	78	520	91	78	507	91	76	560	90

TABLE 2 (continued)

CALIFORNIA ACHIEVEMENT TESTS RESULTS BY SCHOOL
FALL, 1981 FIFTH GRADE RESULTS

SCHOOL	SCHOOL #	# TESTED	TOTAL BATTERY NCE MEAN	TOTAL BATTERY SS MEAN	TOTAL BATTERY PER RANK	READING VOCABULARY NCE MEAN	READING VOCABULARY SS MEAN	READING VOCABULARY PER RANK	READING COMPREHENSION NCE MEAN	READING COMPREHENSION SS MEAN	READING COMPREHENSION PER RANK	TOTAL READING NCE MEAN	TOTAL READING SS MEAN	TOTAL READING PER RANK	SPELLING NCE MEAN	SPELLING SS MEAN	SPELLING PER RANK
SOUTH LAKE	564	63	65	489	78	66	504	79	65	520	77	66	506	79	62	543	72
STEDWICK	568	102	68	496	82	65	501	77	64	518	76	65	506	79	61	540	71
STONEGATE	316	46	69	500	84	69	511	82	66	522	78	67	512	82	62	542	72
STRATHMORE	822	46	56	466	61	56	476	62	56	491	62	56	477	62	59	533	67
SUMMIT HALL	563	56	65	488	77	61	489	71	63	512	73	62	495	73	60	536	69
TRAVILAH	216	53	67	490	78	61	489	71	66	523	78	64	501	77	63	547	74
TWINBROOK	206	59	56	465	60	55	474	61	52	477	54	53	468	56	51	505	53
VIERS MILL	772	50	64	485	75	56	477	63	59	501	67	58	483	66	58	530	66
WASHINGTON GROVE	552	43	65	489	78	61	489	71	65	520	77	64	500	76	57	527	64
WATKINS MILL	561	66	63	483	74	58	482	66	62	510	72	61	490	70	55	519	60
WAYSIDE	235	62	80	527	94	72	522	86	71	538	84	73	527	87	69	570	83
WELLER ROAD	777	57	56	465	60	58	481	66	56	490	61	57	478	63	50	459	50
WEST ROCKVILLE	207	40	64	484	74	60	488	70	65	517	76	63	498	75	53	511	56
WESTBROOK	408	40	70	499	83	73	522	86	68	529	81	71	522	86	64	593	76
WESTOVER	504	47	74	509	88	68	509	81	69	533	83	69	517	84	64	552	76
WHEATON WOODS	788	78	60	475	68	62	492	73	57	494	64	59	486	68	60	535	68
WHETSTONE	558	84	68	495	81	67	506	80	65	519	77	66	509	81	63	546	73
WOOD ACRES	417	55	76	514	90	72	520	85	71	541	86	72	529	88	65	554	77
WOODFIELD	704	81	76	517	91	67	507	80	68	531	82	69	516	84	69	568	82
WOODSIDE	752	52	65	486	76	59	484	68	60	504	69	60	489	70	56	522	62
WYNGATE	422	73	77	514	90	74	526	87	73	548	88	75	536	90	66	557	78

TABLE 2 (continued)

CALIFORNIA ACHIEVEMENT TESTS RESULTS BY SCHOOL
FALL, 1981 FIFTH GRADE RESULTS

SCHOOL	LANGUAGE MECHANICS NCE MEAN	LANGUAGE MECHANICS SS MEAN	LANGUAGE MECHANICS PER RANK	LANGUAGE EXPRESSION NCE MEAN	LANGUAGE EXPRESSION SS MEAN	LANGUAGE EXPRESSION PER RANK	TOTAL LANGUAGE NCE MEAN	TOTAL LANGUAGE SS MEAN	TOTAL LANGUAGE PER RANK	MATH COMPUTATION NCE MEAN	MATH COMPUTATION SS MEAN	MATH COMPUTATION PER RANK	MATH CONC & APP NCE MEAN	MATH CONC & APP SS MEAN	MATH CONC & APP PER RANK	TOTAL MATH NCE MEAN	TOTAL MATH SS MEAN	TOTAL MATH PER RANK	REFERENCE SKILLS NCE MEAN	REFERENCE SKILLS SS MEAN	REFERENCE SKILLS PER RANK
SOUTH LAKE	64	546	75	67	545	81	67	541	80	56	451	61	63	486	74	60	469	69	68	534	81
STEDWICK	67	557	80	67	546	81	69	549	84	64	472	75	68	496	80	67	484	79	68	534	81
STONEGATE	65	550	77	67	550	83	68	547	83	67	479	80	66	492	78	68	486	81	69	537	82
STRATHMORE	56	524	62	55	509	60	56	508	61	52	442	55	54	465	58	54	454	58	63	519	74
SUMMIT HALL	60	534	68	65	540	79	64	530	74	64	471	75	65	491	77	65	480	77	70	541	84
TRAVILAH	64	545	74	69	553	84	68	545	82	63	468	73	65	489	76	65	477	75	65	527	78
TWINBROOK	66	551	78	52	501	54	58	516	66	55	449	60	56	471	63	56	459	62	53	490	57
VIERS MILL	75	580	89	60	524	70	69	545	82	62	467	72	63	486	74	64	476	74	62	517	73
WASHINGTON GROVE	73	575	87	67	544	80	72	557	87	60	461	68	61	482	71	61	471	71	67	531	80
WATKINS MILL	65	549	77	67	544	80	67	541	80	54	446	58	70	503	84	62	474	73	69	537	82
WAYSIDE	81	597	93	81	592	94	84	601	96	76	500	90	76	517	90	78	508	92	75	556	88
WELLER ROAD	53	514	56	58	517	66	56	509	61	56	452	62	53	464	57	55	457	60	61	515	72
WEST ROCKVILLE	66	551	78	67	546	81	68	543	81	58	455	64	62	483	72	61	470	70	71	542	84
WESTBROOK	68	557	80	72	563	87	73	557	87	58	456	65	67	494	79	64	476	74	68	533	80
WESTOVER	71	567	85	70	555	85	73	557	87	69	483	82	76	519	91	74	499	88	73	551	87
WHEATON WOODS	61	538	71	60	523	70	62	524	71	51	439	52	62	483	72	57	462	64	66	530	79
WHETSTONE	66	553	78	68	549	82	69	548	83	63	468	73	66	493	78	65	479	76	66	528	78
WOOD ACRES	71	565	84	76	572	89	76	567	90	71	487	84	75	513	89	75	500	88	73	550	87
WOODFIELD	77	586	91	73	565	88	77	577	92	74	497	88	74	513	89	76	504	90	70	541	84
WOODSIDE	62	539	71	58	519	67	61	523	70	71	488	84	65	491	77	69	487	81	61	512	70
WYNGATE	72	570	86	76	575	90	77	571	91	66	476	78	75	513	89	72	494	85	73	548	86

TABLE 3

CALIFORNIA ACHIEVEMENT TESTS RESULTS BY SCHOOL
FALL, 1981 EIGHTH GRADE RESULTS

SCHOOL	SCHOOL #	# TESTED	TOTAL BATTERY NCE MEAN	TOTAL BATTERY SS MEAN	TOTAL BATTERY PER RANK	READING VOCABULARY NCE MEAN	READING VOCABULARY SS MEAN	READING VOCABULARY PER RANK	READING COMPREHENSION NCE MEAN	READING COMPREHENSION SS MEAN	READING COMPREHENSION PER RANK	TOTAL READING NCE MEAN	TOTAL READING SS MEAN	TOTAL READING PER RANK	SPELLING NCE MEAN	SPELLING SS MEAN	SPELLING PER RANK
BAKER	705	261	64	591	75	60	575	69	64	598	74	62	587	72	58	599	65
BANNEKER	333	265	65	593	76	63	584	73	64	600	75	64	593	75	56	594	62
BELT	787	253	59	572	66	61	577	70	59	582	67	61	581	70	54	584	58
CABIN JOHN	606	272	76	631	90	71	612	85	70	624	84	71	620	86	61	613	71
EASTERN	775	141	60	577	68	60	574	68	59	581	66	60	578	68	54	583	57
FARQUHAR	507	307	65	595	77	63	584	73	65	604	76	65	595	76	56	590	61
FROST	237	362	73	622	88	71	614	85	69	618	82	71	617	85	64	624	75
GAITHERSBURG JR	554	331	61	579	69	58	568	65	61	589	70	60	579	69	56	594	62
HOOVER	228	269	75	628	89	73	622	88	71	627	85	73	626	87	62	618	73
KEY	311	213	58	571	65	58	566	64	59	581	66	59	573	66	52	578	55
KING	107	196	60	576	68	58	566	64	59	584	68	59	575	67	56	594	62
LEE	818	383	62	585	72	60	576	69	63	597	74	63	588	73	55	590	61
MONTGOMERY VILL.	557	277	68	604	81	67	601	81	67	613	80	68	608	81	59	606	68
NEWPORT	792	202	59	572	66	58	566	64	60	586	69	59	577	68	54	586	59
PARKLAND	812	231	65	593	76	63	585	74	62	593	72	63	590	74	58	599	65
POOLESVILLE HS	152	133	60	575	67	59	570	66	59	581	66	59	576	67	54	584	58
PYLE	428	414	77	640	92	74	628	89	75	642	89	76	638	91	67	635	79
REDLAND	562	274	68	604	81	65	594	78	66	607	78	66	601	79	58	599	65
RIDGEVIEW	105	261	66	598	78	63	586	74	64	601	75	64	594	76	59	603	66
SLIGO	778	235	58	572	66	59	571	67	59	581	66	59	575	67	54	583	57
TAKOMA PARK JR	755	172	52	551	55	51	541	52	53	560	56	52	550	54	49	566	49
TILDEN	232	371	74	626	89	70	612	85	70	624	84	71	620	86	62	617	72
JULIUS WEST	211	274	61	580	70	59	571	67	60	584	68	60	577	68	53	581	56
WESTLAND	412	409	71	618	86	70	613	85	70	623	83	71	620	86	63	621	74
WHITE OAK	811	307	69	611	84	68	602	81	69	621	83	69	614	84	58	600	65
WOOD	820	421	68	606	82	66	598	79	66	608	78	67	604	80	59	605	67

TABLE 3 (continued)

CALIFORNIA ACHIEVEMENT TESTS RESULTS BY SCHOOL
FALL, 1981 EIGHTH GRADE RESULTS

SCHOOL	LANGUAGE MECHANICS			LANGUAGE EXPRESSION			TOTAL LANGUAGE			MATH COMPUTATION			MATH CONC & APP			TOTAL MATH			REFERENCE SKILLS		
	NCE MEAN	SS MEAN	PER RANK	NCE MEAN	SS MEAN	PER RANK	NCE MEAN	SS MEAN	PER RANK	NCE MEAN	SS MEAN	PER RANK	NCE MEAN	SS MEAN	PER RANK	NCE MEAN	SS MEAN	PER RANK	NCE MEAN	SS MEAN	PER RANK
BAKER	64	614	76	61	588	70	63	598	73	64	607	76	65	592	76	65	597	77	63	592	74
BANNEKER	62	608	73	63	596	73	63	602	75	65	611	78	63	588	74	65	597	77	64	597	76
BELT	65	617	77	57	577	64	61	593	71	55	572	61	57	567	64	57	567	63	62	590	73
CABIN JOHN	72	645	86	73	636	88	75	645	90	74	645	88	75	630	90	76	637	90	71	620	85
EASTERN	64	616	76	59	584	68	62	596	73	56	575	62	59	571	66	58	571	65	60	582	69
FARQUHAR	62	606	72	64	600	75	64	602	75	62	599	73	68	604	81	66	600	78	64	597	76
FROST	71	640	85	68	615	81	71	627	85	70	630	84	75	628	89	73	628	88	69	612	82
GAITHERSBURG JR	58	590	65	59	585	68	59	586	68	57	579	64	64	588	74	61	583	71	61	587	71
HOOVER	73	650	88	70	625	85	74	639	88	72	635	85	74	623	88	74	627	88	71	621	85
KEY	59	594	67	57	576	63	58	582	66	55	572	61	60	574	68	58	571	65	59	579	67
KING	61	604	72	56	573	62	59	585	67	56	576	63	62	583	72	60	578	68	59	578	67
LEE	60	599	69	59	582	67	60	588	69	62	599	73	64	589	75	64	591	74	63	593	74
MONTGOMERY VILL.	65	618	77	64	603	76	66	610	79	63	600	73	69	605	82	66	601	79	66	602	78
NEWPORT	56	585	63	55	569	60	56	574	62	57	579	64	61	578	70	59	577	68	57	570	63
PARKLAND	68	632	82	62	594	72	66	610	79	61	594	71	66	596	78	64	594	76	61	587	71
POOLESVILLE HS	59	594	67	56	574	62	58	581	65	57	580	64	63	585	73	61	581	70	57	571	63
PYLE	75	656	89	73	637	88	76	649	90	74	646	88	75	631	90	76	637	90	71	621	85
REDLAND	69	633	83	63	599	75	67	613	80	67	616	79	68	603	81	66	608	81	65	601	77
RIDGEVIEW	68	630	82	63	597	74	66	611	79	61	595	71	68	604	81	66	599	78	64	596	75
SLIGO	59	595	68	58	581	66	59	586	68	56	574	62	59	573	67	58	572	65	60	581	68
TAKOMA PARK JR	52	570	55	52	560	55	53	563	56	50	552	51	54	556	58	53	554	56	55	567	61
TILDEN	73	649	87	70	624	84	73	637	88	73	638	86	74	623	88	74	629	88	70	615	83
JULIUS WEST	62	608	73	56	571	61	59	585	67	60	590	69	64	590	75	63	588	73	60	583	69
WESTLAND	70	639	84	68	619	83	71	630	86	66	613	78	71	615	85	69	613	83	68	612	82
WHITE OAK	68	630	82	67	615	81	69	623	83	66	612	78	69	609	83	68	609	82	67	606	79
WOOD	65	617	77	65	604	77	66	611	79	67	615	79	68	605	82	68	609	82	68	610	81

TABLE 4

CALIFORNIA ACHIEVEMENT TESTS RESULTS BY SCHOOL
FALL, 1981 ELEVENTH GRADE RESULTS

SCHOOL	SCHOOL #	# TESTED	TOTAL BATTERY NCE MEAN	TOTAL BATTERY SS MEAN	TOTAL BATTERY PER RANK	READING VOCABULARY NCE MEAN	READING VOCABULARY SS MEAN	READING VOCABULARY PER RANK	READING COMPREHENSION NCE MEAN	READING COMPREHENSION SS MEAN	READING COMPREHENSION PER RANK	TOTAL READING NCE MEAN	TOTAL READING SS MEAN	TOTAL READING PER RANK	SPELLING NCE MEAN	SPELLING SS MEAN	SPELLING PER RANK
BETHESDA-CH. CH.	406	364	69	698	83	66	689	79	67	684	79	68	690	80	58	654	65
H. BLAIR	757	375	50	617	50	50	617	51	50	615	51	50	617	51	48	610	46
CHURCHILL	602	456	73	716	88	68	698	81	69	694	82	70	699	83	63	679	74
DAMASCUS HS	701	248	59	652	66	55	637	59	58	647	65	57	644	63	52	630	55
EINSTEIN	789	219	58	649	65	57	648	64	56	640	62	57	645	64	55	639	59
GAITHERSBURG HS	551	403	58	648	64	56	643	62	56	638	61	57	642	62	52	630	55
W. JOHNSON	424	290	70	701	84	67	693	80	68	689	81	69	694	81	61	666	70
KENNEDY	815	319	62	667	72	60	659	68	62	664	72	62	664	71	55	641	60
MAGRUDER	510	280	65	680	77	62	671	73	62	664	72	63	669	73	60	662	68
R. MONTGOMERY	201	285	59	653	66	58	653	66	59	653	68	60	655	68	53	630	55
NORTHWOOD	796	317	61	660	69	59	655	67	59	650	66	60	655	68	56	646	62
PAINT BRANCH	315	308	64	673	75	61	665	70	63	667	73	63	668	73	56	647	62
PEARY	806	341	61	662	70	59	656	67	59	650	66	59	655	68	57	648	62
POOLESVILLE HS	152	92	52	625	54	53	629	56	54	629	58	54	630	57	46	604	44
ROCKVILLE	230	385	66	684	79	63	673	73	65	675	76	65	677	76	59	658	67
SENECA VALLEY	104	440	63	669	73	60	661	69	62	663	72	62	664	71	57	648	62
SHERWOOD HS	503	323	58	648	64	57	647	63	59	650	66	58	650	66	54	636	57
SPRINGBROOK	798	463	65	679	77	64	678	75	64	670	74	65	676	76	61	668	70
WHEATON	782	275	54	633	58	53	629	56	53	625	56	53	628	56	51	625	53
WHITMAN	427	498	72	711	87	70	707	84	69	696	83	71	704	84	63	676	73
WOODWARD	222	265	71	708	86	67	693	80	66	682	78	68	689	80	65	684	76
WOOTTON	234	402	71	705	85	70	704	83	68	691	81	70	700	83	64	680	75

TABLE 4 (continued)

CALIFORNIA ACHIEVEMENT TESTS RESULTS BY SCHOOL
FALL, 1981 ELEVENTH GRADE RESULTS

SCHOOL	LANGUAGE MECHANICS NCE MEAN	LANGUAGE MECHANICS SS MEAN	LANGUAGE MECHANICS PER RANK	LANGUAGE EXPRESSION NCE MEAN	LANGUAGE EXPRESSION SS MEAN	LANGUAGE EXPRESSION PER RANK	TOTAL LANGUAGE NCE MEAN	TOTAL LANGUAGE SS MEAN	TOTAL LANGUAGE PER RANK	MATH COMPUTATION NCE MEAN	MATH COMPUTATION SS MEAN	MATH COMPUTATION PER RANK	MATH CONC & APP NCE MEAN	MATH CONC & APP SS MEAN	MATH CONC & APP PER RANK	TOTAL MATH NCE MEAN	TOTAL MATH SS MEAN	TOTAL MATH PER RANK	REFERENCE SKILLS NCE MEAN	REFERENCE SKILLS SS MEAN	REFERENCE SKILLS PER RANK
BETHESDA-CH. CH.	66	677	78	69	694	83	70	698	84	62	668	72	68	690	80	66	683	78	63	671	74
M. BLAIR	51	616	53	50	612	49	50	616	51	51	617	52	51	618	52	51	618	52	52	622	53
CHURCHILL	71	696	84	71	702	85	73	709	87	67	689	79	72	710	86	71	706	84	68	690	81
DAMASCUS HS	58	643	65	56	638	62	57	644	64	59	652	66	59	654	67	60	655	68	61	660	70
EINSTEIN	57	639	63	55	633	59	56	638	61	57	645	64	61	659	69	59	653	67	57	644	63
GAITHERSBURG HS	57	639	63	59	651	68	59	649	66	55	636	60	59	651	66	57	645	64	57	646	64
W. JOHNSON	65	675	77	68	688	81	68	689	81	67	687	78	69	696	82	69	696	82	67	686	79
KENNEDY	60	652	69	59	653	68	60	656	69	60	658	69	62	668	72	62	666	72	66	680	77
MAGRUDER	62	660	72	62	662	72	63	667	73	64	675	74	65	678	76	65	680	77	63	670	74
R. MONTGOMERY	57	640	63	56	636	61	57	641	63	58	647	64	60	655	67	59	652	67	59	653	67
NORTHWOOD	61	656	70	59	651	68	61	658	70	58	650	66	60	658	68	60	656	68	61	659	69
PAINT BRANCH	63	664	73	62	662	72	63	669	74	62	666	71	64	674	74	64	672	74	63	668	73
PEARY	63	663	73	62	662	72	63	668	74	58	650	66	61	661	70	60	658	69	60	658	69
POOLESVILLE HS	51	617	53	47	600	44	49	610	49	55	637	61	53	627	56	55	633	59	53	628	56
ROCKVILLE	64	670	76	62	665	73	64	673	76	62	668	72	68	691	80	66	684	78	63	671	74
SENECA VALLEY	61	655	70	63	667	74	63	668	74	59	654	67	62	665	71	61	662	71	61	662	71
SHERWOOD HS	56	638	63	58	645	65	58	645	64	56	638	61	58	647	64	57	643	63	58	649	65
SPRINGBROOK	64	669	75	63	666	74	64	673	76	61	663	70	64	674	74	63	671	74	65	677	76
WHEATON	54	629	59	54	629	57	54	632	59	52	623	55	54	632	58	54	629	57	56	638	60
WHITMAN	67	682	80	70	696	84	70	697	83	68	692	80	72	709	85	71	705	84	67	686	79
WOODWARD	70	695	84	68	689	82	70	699	84	67	688	79	72	710	86	71	705	84	66	681	78
WOOTTON	64	667	75	66	679	78	66	679	78	67	687	78	71	706	84	70	702	83	65	679	77

Total Battery Interquartile Ranges

These figures contain bars showing the interquartile range for the Total Battery for each school. This range indicates the score (national percentile rank) of the student at the 25th and 75th percentile for a school. It shows how the middle 50 percent of the students in the school performed. This group could be considered "typical" for that school because no extreme scores are included to skew the results. Schools are presented in these figures in alphabetical order by grade. The first page for each grade follows:

Grade 3--Page 41

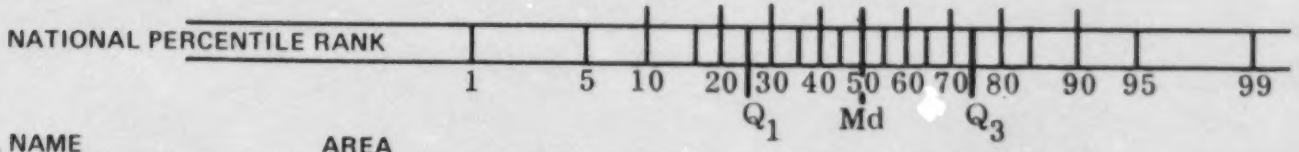
Grade 5--Page 49

Grade 8--Page 57

Grade 11--Page 59

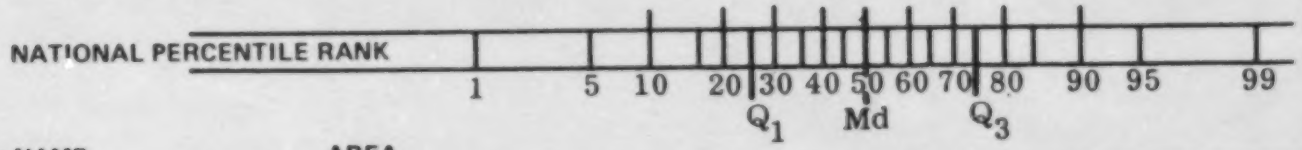
County (all grades)--Page 61

NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) — CALIFORNIA ACHIEVEMENT TESTS GRADE 3, TOTAL BATTERY, 1981-82



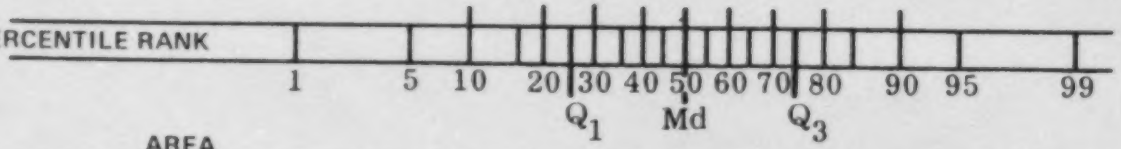
SCHOOL NAME	AREA	Q1	Md	Q3
ARCOLA ELEMENTARY	1	49	82	94
ASHBURTON ELEMENTARY	2	66	85	99
AYRLAWN ELEMENTARY	2	47	67	85
BANNOCKBURN ELEMENTARY	2	74	84	98
LUCY BARNSLEY ELEMENTARY	2	75	88	96
BELLS MILL ELEMENTARY	2	58	75	94
BELMONT ELEMENTARY	1	84	90	95
BEL PRE ELEMENTARY	1	77	87	94
BETHESDA ELEMENTARY	2	66	86	97
BEVERLY FARMS ELEMENTARY	2	78	88	97
BRADLEY ELEMENTARY	2	70	85	98
BROAD ACRES ELEMENTARY	1	22	66	83
BROOKHAVEN ELEMENTARY	2	56	83	96
BROOKMONT ELEMENTARY	2	71	86	98
BROOKVIEW ELEMENTARY	1	25	42	61

NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) — CALIFORNIA ACHIEVEMENT TESTS GRADE 3, TOTAL BATTERY, 1981-82 (Continued)



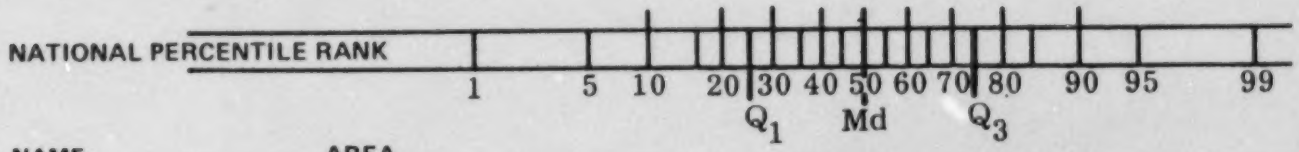
SCHOOL NAME	AREA	Q1	Md	Q3
BROWN STATION ELEMENTARY	3	41	65	88
BURNING TREE ELEMENTARY	2	93	98	99
BURTONSVILLE ELEMENTARY	1	52	79	98
CANDLEWOOD ELEMENTARY	3	48	68	83
CANNON ROAD ELEMENTARY	1	54	77	92
CARDEROCK SPRINGS ELEMENTARY	2	88	95	99
CASHELL ELEMENTARY	3	54	79	90
CEDAR GROVE ELEMENTARY	3	52	67	96
CHEVY CHASE ELEMENTARY	2	49	79	96
CLARKSBURG ELEMENTARY	3	37	64	90
CLOVERLY ELEMENTARY	1	49	69	85
COLD SPRING ELEMENTARY	3	84	93	99
COLLEGE GARDEN ELEMENTARY	2	65	86	96
CONGRESSIONAL ELEMENTARY	2	71	84	94
CONNECTICUT PARK ELEMENTARY	1	60	74	83

NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) – CALIFORNIA ACHIEVEMENT TESTS GRADE 3, TOTAL BATTERY, 1981-82 (Continued)



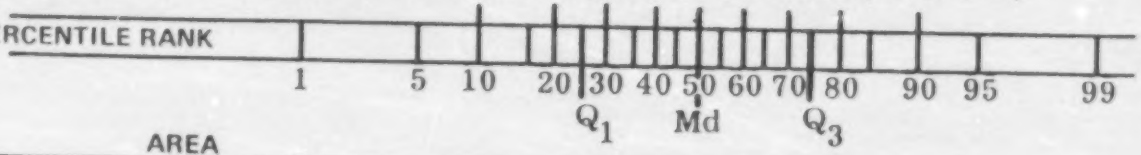
SCHOOL NAME	AREA			
CRESTHAVEN ELEMENTARY	1	57	88	98
DAMASCUS ELEMENTARY	3	62	83	96
DARNESTOWN ELEMENTARY	3	64	82	94
DIAMOND ELEMENTARY	3	65	79	94
DUFIEF ELEMENTARY	3	62	77	93
EAST SILVER SPRING ELEMENTARY	1	20	43	64
FAIRLAND ELEMENTARY	1	50	83	96
FALLSMEAD ELEMENTARY	3	55	92	96
FARMLAND ELEMENTARY	2	66	94	99
FIELDS ROAD ELEMENTARY	3	55	78	88
FLOWER VALLEY ELEMENTARY	2	63	79	95
FOREST GROVE ELEMENTARY	1	67	81	91
FOREST KNOLLS ELEMENTARY	1	48	71	86
FOUR CORNERS ELEMENTARY	1	45	72	95
FOX CHAPEL ELEMENTARY	3	42	67	88

NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) — CALIFORNIA ACHIEVEMENT TESTS GRADE 3, TOTAL BATTERY, 1981-82 (Continued)



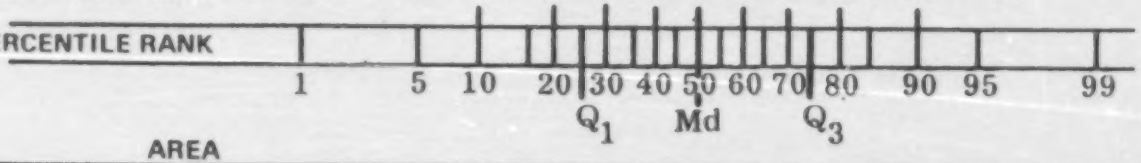
SCHOOL NAME	AREA			
GAITHERSBURG ELEMENTARY	3	40	65	88
GALWAY ELEMENTARY	1	41	72	90
GARRETT PARK ELEMENTARY	2	48	78	92
GEORGETOWN HILL ELEMENTARY	2	83	94	98
GEORGIAN FOREST ELEMENTARY	1	55	86	97
GERMANTOWN ELEMENTARY	3	64	85	92
GLEN HAVEN ELEMENTARY	1	35	62	80
GLENALLAN ELEMENTARY	1	41	55	73
GREENWOOD ELEMENTARY	1	57	75	92
HARMONY HILLS ELEMENTARY	2	34	56	83
HIGHLAND ELEMENTARY	1	23	55	76
HUNGERFORD PARK ELEMENTARY	2	46	72	92
JACKSON ROAD ELEMENTARY	1	61	77	90
KEMP MILL ELEMENTARY	1	75	96	99
KENSINGTON ELEMENTARY	1	66	80	98

NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) — CALIFORNIA ACHIEVEMENT TESTS GRADE 3, TOTAL BATTERY, 1981-82 (Continued)



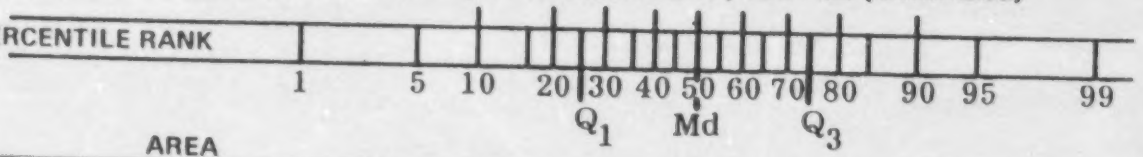
SCHOOL NAME	AREA	Q1	Md	Q3
LAKE NORMANDY ELEMENTARY	2	79	88	96
LAKEWOOD ELEMENTARY	3	83	94	98
LAYTONSVILLE ELEMENTARY	3	51	68	85
LONE OAK ELEMENTARY	2	43	60	79
LUXMANOR ELEMENTARY	2	68	86	96
LYNNBROOK ELEMENTARY	2	28	69	84
MARYVALE ELEMENTARY	2	23	33	54
MEADOW HALL ELEMENTARY	2	39	56	71
MILL CREEK TOWNE ELEMENTARY	3	58	82	98
MONOCACY ELEMENTARY	3	21	55	77
MONTROSE ELEMENTARY	2	60	76	89
NEW HAMPSHIRE ESTATES ELEMENTARY	1	40	61	77
NORTH CHEVY CHASE ELEMENTARY	2	55	76	90
OAK VIEW ELEMENTARY	1	47	70	79
OAKLAND TERRACE ELEMENTARY	1	52	69	77

NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) — CALIFORNIA ACHIEVEMENT TESTS GRADE 3, TOTAL BATTERY, 1981-82 (Continued)



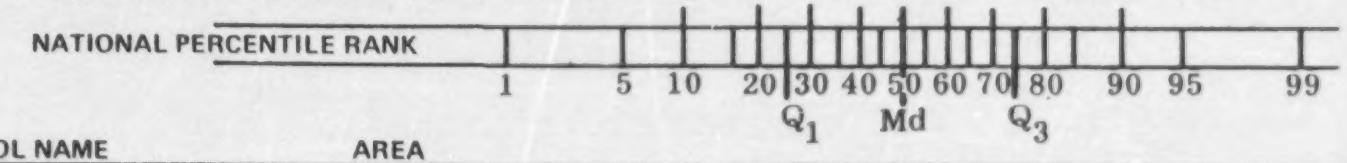
SCHOOL NAME	AREA	
OLNEY ELEMENTARY	1	50 74 91
WILLIAM TYLER PAGE ELEMENTARY	1	42 65 76
PARKWOOD ELEMENTARY	2	33 66 90
PINE CREST ELEMENTARY	1	56 83 91
PLEASANT VIEW ELEMENTARY	1	36 63 77
POOLESVILLE ELEMENTARY	3	45 67 83
POTOMAC ELEMENTARY	2	64 78 89
RADNOR ELEMENTARY	2	62 72 82
RITCHIE PARK ELEMENTARY	3	68 92 98
ROCK CREEK FOREST ELEMENTARY	2	60 73 90
ROCK CREEK PALISADES ELEMENTARY	1	70 84 96
ROCK CREEK VALLEY ELEMENTARY	2	66 86 97
ROCKING HORSE ROAD ELEMENTARY	1	41 63 85
ROLLING TERRACE ELEMENTARY	1	33 52 88
ROLLINGWOOD ELEMENTARY	2	68 86 95

NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) — CALIFORNIA ACHIEVEMENT TESTS GRADE 3, TOTAL BATTERY, 1981-82 (Continued)



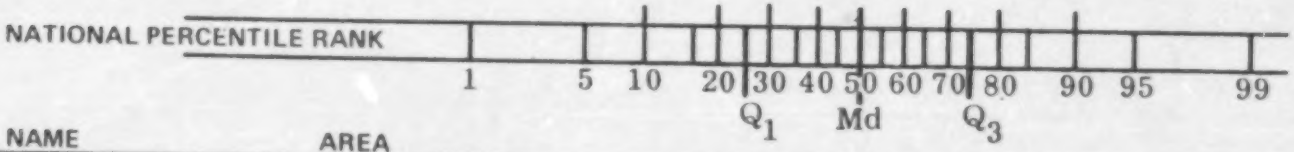
SCHOOL NAME	AREA	Q1	Md	Q3
ROSEMONT ELEMENTARY	3	25	54	87
SADDLEBROOK ELEMENTARY	1	45	72	91
SEVEN LOCKS ELEMENTARY	2	67	84	93
SHERWOOD ELEMENTARY	1	49	73	91
SOMERSET ELEMENTARY	2	82	93	98
SOUTH LAKE ELEMENTARY	3	48	63	79
STEDWICK ELEMENTARY	3	45	74	88
STONEGATE ELEMENTARY	1	56	83	94
STRATHMORE ELEMENTARY	1	37	48	68
SUMMIT HALL ELEMENTARY	3	50	71	91
TAKOMA PARK ELEMENTARY	1	17	50	86
TRAVILAH ELEMENTARY	3	50	72	86
TWINBROOK ELEMENTARY	2	28	51	75
VIERS MILL ELEMENTARY	1	33	64	75
WASHINGTON GROVE ELEMENTARY	3	46	62	75

NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) — CALIFORNIA ACHIEVEMENT TESTS GRADE 3, TOTAL BATTERY, 1981-82 (Continued)



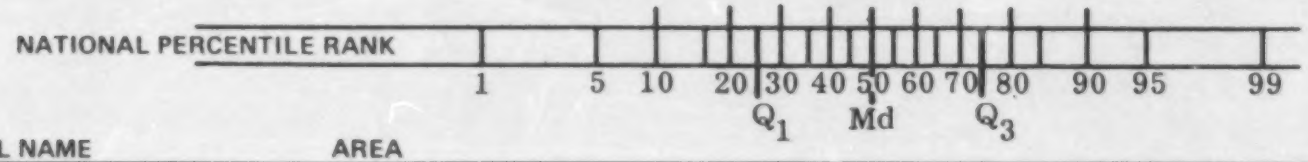
SCHOOL NAME	AREA	Q1	Md	Q3
WATKINS MILL ELEMENTARY	3	61	79	97
WAYSIDE ELEMENTARY	2	69	83	95
WELLER ROAD ELEMENTARY	1	43	60	83
WEST ROCKVILLE ELEMENTARY	2	43	76	87
WESTBROOK ELEMENTARY	2	77	87	95
WESTOVER ELEMENTARY	1	50	78	93
WHEATON WOODS ELEMENTARY	2	34	55	83
WHETSTONE ELEMENTARY	3	51	77	96
WOOD ACRES ELEMENTARY	2	66	86	97
WOODFIELD ELEMENTARY	3	66	83	92
WOODLIN ELEMENTARY	1	34	58	85
WYNGATE ELEMENTARY	2	67	84	93

NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) — CALIFORNIA ACHIEVEMENT TESTS GRADE 5, TOTAL BATTERY, 1981-82



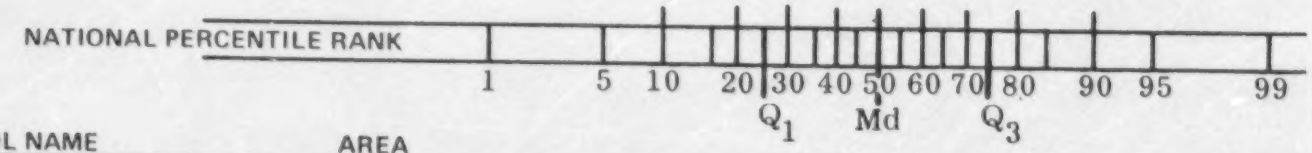
SCHOOL NAME	AREA			
ARCOLA ELEMENTARY	1	48	75	90
ASHBURTON ELEMENTARY	2	53	72	93
AYRLAWN ELEMENTARY	2	66	74	90
BANNOCKBURN ELEMENTARY	2	58	82	95
LUCY BARNSLEY ELEMENTARY	2	68	86	96
BELLS MILL ELEMENTARY	2	74	90	97
BELMONT ELEMENTARY	1	72	83	93
BEL PRE ELEMENTARY	1	55	75	92
BETHESDA ELEMENTARY	2	69	89	95
BEVERLY FARMS ELEMENTARY	2	68	91	97
BRADLEY ELEMENTARY	2	76	92	98
BROAD ACRES ELEMENTARY	1	33	43	63
BROOKHAVEN ELEMENTARY	2	53	74	91
BROOKMONT ELEMENTARY	2	69	87	97
BROOKVIEW ELEMENTARY	1	40	51	66

NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) — CALIFORNIA ACHIEVEMENT TESTS GRADE 5, TOTAL BATTERY, 1981-82 (continued)



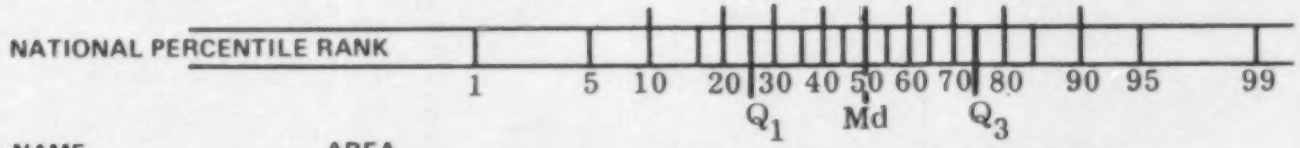
SCHOOL NAME	AREA			
BROWN STATION ELEMENTARY	3	55	87	92
BURNING TREE ELEMENTARY	2	81	95	99
BURTONSVILLE ELEMENTARY	1	46	77	90
CANDLEWOOD ELEMENTARY	3	62	86	98
CANNON ROAD ELEMENTARY	1	59	85	97
CARDEROCK SPRINGS ELEMENTARY	2	63	81	96
CASHELL ELEMENTARY	3	59	79	94
CEDAR GROVE ELEMENTARY	3	64	82	95
CHEVY CHASE ELEMENTARY	2	61	82	98
CLARKSBURG ELEMENTARY	3	32	62	83
CLOVERLY ELEMENTARY	1	51	79	93
COLD SPRING ELEMENTARY	3	70	91	98
COLLEGE GARDENS ELEMENTARY	2	62	77	95
CONGRESSIONAL ELEMENTARY	2	59	70	84
CONNECTICUT PARK ELEMENTARY	1	60	64	88

NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) — CALIFORNIA ACHIEVEMENT TESTS GRADE 5, TOTAL BATTERY, 1981-82 (continued)



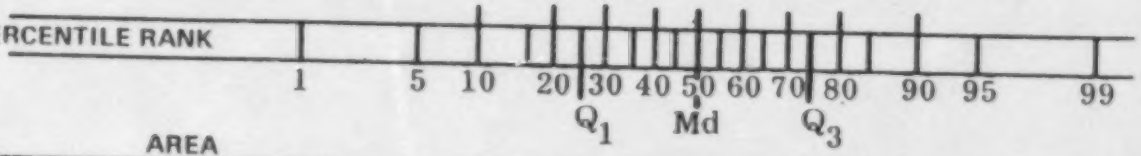
SCHOOL NAME	AREA			
CRESTHAVEN ELEMENTARY	1	61	76	94
DAMASCUS ELEMENTARY	3	51	70	92
DARNESTOWN ELEMENTARY	3	76	89	97
DIAMOND ELEMENTARY	3	59	86	96
DUFIEF ELEMENTARY	3	65	81	94
FAIRLAND ELEMENTARY	1	55	79	90
FALLSMEAD ELEMENTARY	3	70	83	95
FARMLAND ELEMENTARY	2	79	91	99
FIELDS ROAD ELEMENTARY	3	54	70	87
FLOWER VALLEY ELEMENTARY	2	60	78	93
FOREST GROVE ELEMENTARY	1	63	82	97
FOREST KNOLLS ELEMENTARY	1	44	79	95
FOUR CORNERS ELEMENTARY	1	52	80	97
FOX CHAPEL ELEMENTARY	3	48	75	94
GAITHERSBURG ELEMENTARY	3	43	75	91

NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) — CALIFORNIA ACHIEVEMENT TESTS GRADE 5, TOTAL BATTERY, 1981-82 (continued)



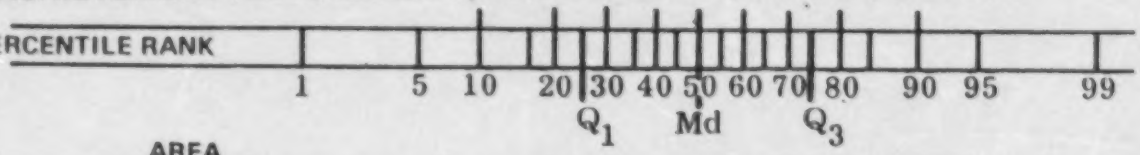
SCHOOL NAME	AREA			
GALWAY ELEMENTARY	1	55	79	92
GARRETT PARK ELEMENTARY	2	52	76	95
GEORGETOWN HILL ELEMENTARY	2	68	85	95
GEORGIAN FOREST ELEMENTARY	1	63	81	95
GERMANTOWN ELEMENTARY	3	64	76	89
GLEN HAVEN ELEMENTARY	1	40	64	77
GLENALLAN ELEMENTARY	1	47	69	86
GREENWOOD ELEMENTARY	1	54	77	91
HARMONY HILLS ELEMENTARY	2	33	54	78
HIGHLAND ELEMENTARY	1	40	65	90
HIGHLAND VIEW ELEMENTARY	1	34	70	91
HUNGERFORD PARK ELEMENTARY	2	49	75	90
JACKSON ROAD ELEMENTARY	1	54	79	95
KEMP MILL ELEMENTARY	1	53	86	97
KENSINGTON ELEMENTARY	1	68	90	96

NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) — CALIFORNIA ACHIEVEMENT TESTS GRADE 5, TOTAL BATTERY, 1981-82 (continued)



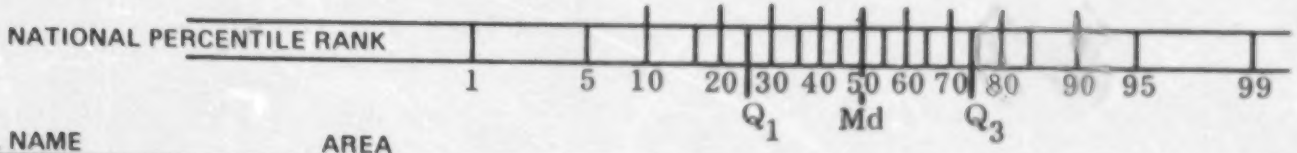
SCHOOL NAME	AREA	Q1	Md	Q3
LAKE NORMANDY ELEMENTARY	2	75	87	98
LAKEWOOD ELEMENTARY	3	60	80	95
LAYTONSVILLE ELEMENTARY	3	60	90	98
LONE OAK ELEMENTARY	2	43	59	76
LUXMANOR ELEMENTARY	2	85	96	98
LYNNBROOK ELEMENTARY	2	51	77	91
MARYVALE ELEMENTARY	2	19	37	53
MEADOW HALL ELEMENTARY	2	47	57	89
MILL CREEK TOWNE ELEMENTARY	3	52	79	92
MONOCACY ELEMENTARY	3	37	52	74
MONTROSE ELEMENTARY	2	52	63	73
NORTH CHEVY CHASE ELEMENTARY	2	54	83	97
OAK VIEW ELEMENTARY	1	36	60	79
OAKLAND TERRACE ELEMENTARY	1	52	72	88
OLNEY ELEMENTARY	1	63	81	94

NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) — CALIFORNIA ACHIEVEMENT TESTS GRADE 5, TOTAL BATTERY, 1981-82 (continued)



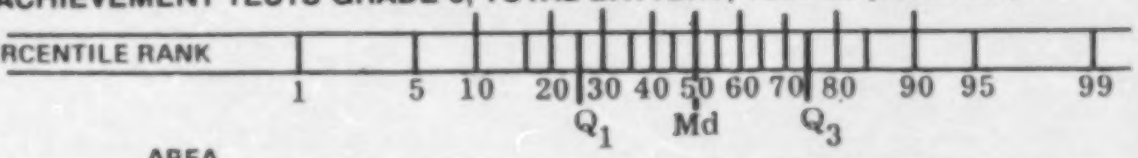
SCHOOL NAME	AREA			
WILLIAM TYLER PAGE ELEMENTARY	1	49	72	89
PARKWOOD ELEMENTARY	2	37	73	94
PINE CREST ELEMENTARY	1	43	58	78
PINEY BRANCH ELEMENTARY	1	33	55	85
PLEASANT VIEW ELEMENTARY	1	60	70	88
POOLESVILLE ELEMENTARY	3	47	67	88
POTOMAC ELEMENTARY	2	75	86	97
RADNOR ELEMENTARY	2	73	84	98
RITCHIE PARK ELEMENTARY	3	74	91	97
ROCK CREEK FOREST ELEMENTARY	2	58	79	92
ROCK CREEK PALISADES ELEMENTARY	1	47	81	92
ROCK CREEK VALLEY ELEMENTARY	2	68	91	97
ROCKING HORSE ROAD ELEMENTARY	1	29	48	81
ROLLINGWOOD ELEMENTARY	2	70	85	95
ROSEMONT ELEMENTARY	3	47	61	80

NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) — CALIFORNIA ACHIEVEMENT TESTS GRADE 5, TOTAL BATTERY, 1981-82 (continued)



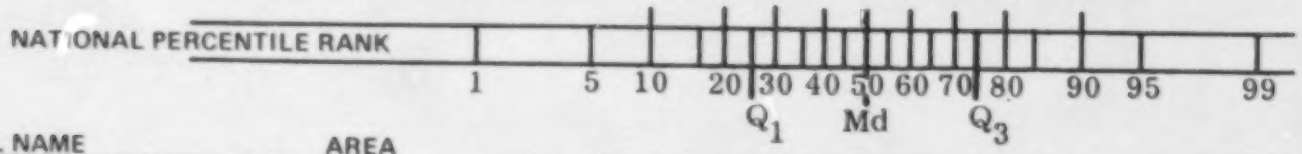
SCHOOL NAME	AREA			
SADDLEBROOK ELEMENTARY	1	55	83	97
SEVEN LOCKS ELEMENTARY	2	79	88	98
SHERWOOD ELEMENTARY	1	51	74	89
SOMERSET ELEMENTARY	2	77	91	99
SOUTH LAKE ELEMENTARY	3	57	76	90
STEDWICK ELEMENTARY	3	59	76	94
STONEGATE ELEMENTARY	1	56	73	97
STRATHMORE ELEMENTARY	1	26	59	86
SUMMIT HALL ELEMENTARY	3	57	77	91
TRAVILAH ELEMENTARY	3	57	76	90
TWINBROOK ELEMENTARY	2	41	54	79
VIERS MILL ELEMENTARY	1	50	66	91
WASHINGTON GROVE ELEMENTARY	3	58	78	88
WATKINS MILL ELEMENTARY	3	51	74	90
WAYSIDE ELEMENTARY	2	77	95	99

NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) — CALIFORNIA ACHIEVEMENT TESTS GRADE 5, TOTAL BATTERY, 1981-82 (continued)



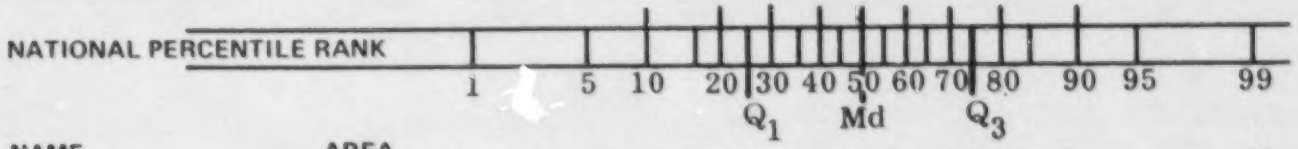
SCHOOL NAME	AREA	
WELLER ROAD ELEMENTARY	1	42 58 85
WEST ROCKVILLE ELEMENTARY	2	58 75 86
WESTBROOK ELEMENTARY	2	57 81 95
WESTOVER ELEMENTARY	1	72 92 96
WHEATON WOODS ELEMENTARY	2	47 68 84
WHETSTONE ELEMENTARY	3	52 77 94
WOOD ACRES ELEMENTARY	2	77 90 96
WOODFIELD ELEMENTARY	3	67 88 98
WOODSIDE ELEMENTARY	1	50 72 91
WYNGATE ELEMENTARY	2	75 91 97

NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) — CALIFORNIA ACHIEVEMENT TESTS GRADE 8, TOTAL BATTERY, 1981-82



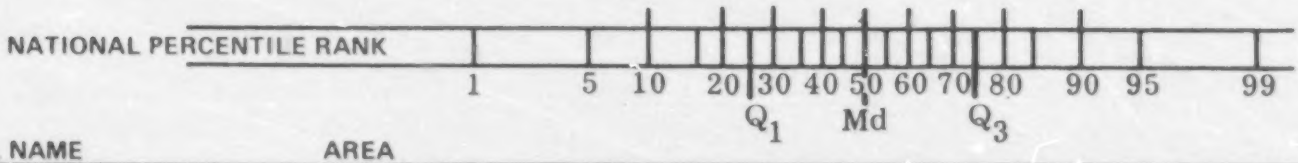
SCHOOL NAME	AREA	Q1	Md	Q3
JOHN T. BAKER JUNIOR HIGH	3	56	76	90
BENJAMIN BANNEKER JUNIOR HIGH	1	52	73	91
COL. JOSEPH BELT JUNIOR HIGH	1	40	67	83
CABIN JOHN JUNIOR HIGH	2	76	90	97
EASTERN INTERMEDIATE	1	47	70	84
WILLIAM H. FARQUHAR MIDDLE SCHOOL	1	54	73	92
ROBERT FROST JUNIOR HIGH	3	72	86	96
GAITHERSBURG JUNIOR HIGH	3	43	69	88
HERBERT HOOVER JUNIOR HIGH	2	73	90	96
FRANCIS SCOTT KEY JUNIOR HIGH	1	39	64	87
MARTIN LUTHER KING JUNIOR HIGH	3	36	67	89
COL. E. BROOKE LEE JUNIOR HIGH	1	49	73	89
MONTGOMERY VILLAGE JUNIOR HIGH	3	62	81	93
NEWPORT MIDDLE SCHOOL	1	39	65	87
PARKLAND JUNIOR HIGH	2	54	74	89

NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) — CALIFORNIA ACHIEVEMENT TESTS GRADE 8, TOTAL BATTERY, 1981-82 (continued)



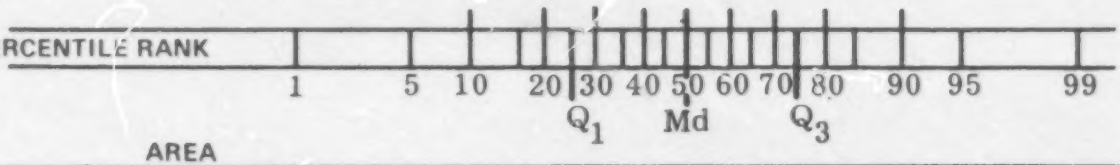
SCHOOL NAME	AREA	
POOLESVILLE HIGH	3	45 66 85
THOMAS W. PYLE JUNIOR HIGH	2	80 91 98
REDLAND MIDDLE SCOOL	3	61 81 93
RIDGEVIEW JUNIOR HIGH	3	57 78 93
SLIGO JUNIOR HIGH	1	37 65 87
TAKOMA PARK JUNIOR HIGH	1	27 52 74
TILDEN JUNIOR HIGH	2	71 89 96
JULIUS WEST MIDDLE SCHOOL	2	45 66 88
WESTLAND INTERMEDIATE	2	67 86 96
WHITE OAK JUNIOR HIGH	1	60 82 94
EARLE B. WOOD JUNIOR HIGH	2	59 80 94

NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) — CALIFORNIA ACHIEVEMENT TESTS GRADE 11, TOTAL BATTERY, 1981-82



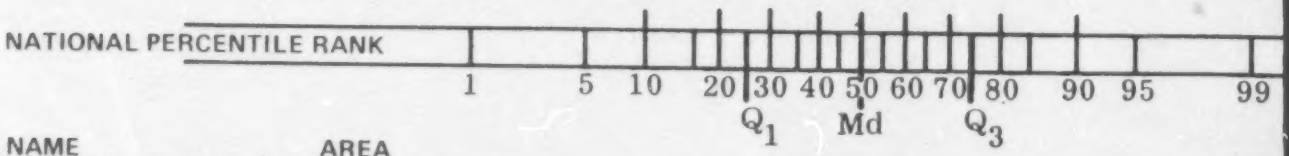
SCHOOL NAME	AREA	Q1	Md	Q3
BETHESDA-CHEVY CHASE HIGH	2	54	82	96
MONTGOMERY BLAIR HIGH	1	29	49	73
WINSTON CHURCHILL HIGH	2	71	88	96
DAMASCUS HIGH	3	42	65	83
ALBERT EINSTEIN HIGH	1	43	64	81
GAITHERSBURG HIGH	3	38	63	85
WALTER JOHNSON HIGH	2	61	82	95
JOHN F. KENNEDY HIGH	1	45	68	90
COL. ZADOK MAGRUDER HIGH	3	54	74	93
RICHARD MONTGOMERY HIGH	2	39	67	86
NORTHWOOD HIGH	1	41	68	87
PAINT BRANCH HIGH	1	53	74	90
ROBERT E. PEARY HIGH	2	46	67	87
POOLESVILLE HIGH	3	27	56	75
ROCKVILLE HIGH	2	56	75	93

NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT EACH SCHOOL'S FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) — CALIFORNIA ACHIEVEMENT TESTS GRADE 11, TOTAL BATTERY, 1981-82 (continued)



SCHOOL NAME	AREA			
SENECA VALLEY HIGH	3	50	73	88
SHERWOOD HIGH	1	43	67	85
SPRINGBROOK HIGH	1	54	76	91
WHEATON HIGH	1	39	56	74
WALT WHITMAN HIGH	2	65	84	96
CHARLES W. WOODWARD HIGH	2	68	84	94
THOMAS S. WOOTTON HIGH	3	69	83	94

NATIONAL PERCENTILE RANK FOR THE STUDENT SCORING AT THE COUNTY'S FIRST QUARTILE (Q1), MEDIAN, AND THIRD QUARTILE (Q3) — CALIFORNIA ACHIEVEMENT TESTS, TOTAL BATTERY, 1981-82



SCHOOL NAME	AREA			
GRADE 3 COUNTY (CAT)		51	76	92
GRADE 5 COUNTY (CAT)		55	79	94
GRADE 8 COUNTY (CAT)		54	78	93
GRADE 11 COUNTY (CAT)		49	74	91

Longitudinal Trends

The school longitudinal analysis presents the score trends of students tested in the same school twice. This testing was done in Grades 3 and 5. This analysis provides a better indication of possible program strengths and weaknesses than does comparing scores for groups of different students[7]. When scores for different students are compared, differences in their ability can confound any judgements about quality. That is, brighter students may score higher because of their own talents, not because their educational program is any better. Using the results for the same group of students at two grade levels eliminates this confounding factor.

While longitudinal data have the advantage cited above, they should not be used to label schools as having good or poor programs but only as a "flag" suggesting that a closer look needs to be taken. Judgement of the quality of a school program needs to be based on many things in addition to standardized test scores, no matter how well they are analyzed. Additionally, the statistic being used, difference scores, is somewhat unstable. For these and other reasons the longitudinal results for a given school are often not consistent from year to year. That is, the method will generally not flag a school two years in a row. Thus, before a school is cited as having a good or poor program based on longitudinal data, the results of several years need to be reviewed.

The identification of a school as having good or poor score trends in a given year can be affected by some of the interpretive problems discussed in an earlier section of this report. If the school longitudinal group has a score decline or increase, it could be the result of test characteristics, not the quality of the school program. One reason for score changes could be that the norm group for the CAT had higher ability than did the norm group for the ITBS. Thus, when students were assigned standardized scores (e.g., percentile ranks) on the CAT, they were being compared to brighter students and did not appear to perform as well. Another reason for score changes could be that the content of the CAT was a better match to the MCPS curriculum. In this case students would have been taught more of the ITBS content but not necessarily any more of the MCPS curriculum. Thus, their scores would have improved without their actually learning any more.

In an attempt to correct for the effect of test characteristics, a baseline for comparison has been established. This baseline is the average trend, countywide, for the students tested twice in the same school. This is being used on the assumption that, if these characteristics influence score trends, the county trend will indicate the amount of correction that is needed.

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7. The groups might be the current third grade and last year's third grade or the current third and fifth grades.

Substantial deviation (8 or more NCE points) from this baseline by a school trend is an indication of potential strength or weakness. School trends that are 8 or more NCE points above the county trend will be indicated by a plus (+). School trends that are 8 or more NCE points below the county trend will be indicated by a minus (-). When reviewing data for small groups (fewer than 30) one should use extra caution before reaching conclusions about program strengths and weaknesses. Mean scores for groups of fewer than 30 are somewhat unstable and can be unduly influenced by a few very high or very low scores. No results are reported for groups of fewer than 10 because of the extreme instability of mean scores for groups that size. County trends for students tested in the same school are summarized in Table 5. Also shown in that table are the differences required to indicate substantial change.

This section of the report contains three tables of school data. Table 6 presents the elementary school longitudinal results from Grade 3 to 5 for the 1981-82 school year. Given the grades in which we test, that is, 3, 5, 8, and 11, school longitudinal results can only be computed for elementary schools.

Table 7 presents a summary of four years of school longitudinal analyses. This makes it possible to see which schools are consistently identified as having good or poor programs. The table shows the subject areas and years in which each elementary school had a substantial deviation from the county longitudinal trend. The schools have been grouped into quarters based on the Grade 3 scores for the 1981-82 report group. This grouping is helpful in evaluating results because there is a tendency for very high (low) scoring schools to have their scores go down (up) the next time they are tested.[8] Presenting the results for the similarly scoring schools together helps to determine if a school's trend is "what might be expected" (i.e., similar to schools that start at the same level) or if it is unusual for schools at that level and therefore merits special attention.

Table 8 contains what will be called quasilongitudinal data. It shows the trends for students who move as a group from one school to another between the Grade 3 testing and the Grade 5 testing. This occurs because at least one of the schools does not have both grades.

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8. The statistical name for this phenomenon is regression effect. A review of the four years of school longitudinal results shows a slight regression effect. Schools that start off (Grade 3) in the top quarter tend to have an average trend that is a point or two lower than the county trend. Likewise schools that start in the bottom quarter tend to have an average trend a point or two higher than the county trend.

TABLE 5

COUNTYWIDE MEANS AND MAGNITUDE OF TREND NEEDED
TO INDICATE SUBSTANTIAL* CHANGE FOR
LONGITUDINAL AND NONLONGITUDINAL SCHOOL RESULTS

	Longitudinal				Nonlongitudinal			
	Spring 1980 Grade 3 ITBS NCE Mean	Fall 1981 Grade 5 CAT NCE Mean	Substantial Increase	Substantial Decrease	Spring 1980 Grade 3 ITBS NCE Mean	Fall 1981 Grade 5 CAT NCE Mean	Substantial Increase	Substantial Decrease
Reading Comprehension	62	65	11	5	56	60	12	4
Language	71	70	7	9	64	63	7	9
Mathematics	66	68	10	6	58	62	12	4
Composite/Total Battery	68	69	7	9	61	62	9	7

*Substantial is defined as 8 or more NCE points above or below the county trend.

TABLE 6

SCHOOL LONGITUDINAL RESULTS FOR STUDENTS TESTED IN THE SAME SCHOOL IN GRADE 3 (ITBS, SPRING 1980) AND GRADE 5 (CAT, FALL 1981)

School	School Number	Grade	Number Tested	Reading Comprehension NCE Mean	Reading Comprehension Percentile Rank of Mean	Language NCE Mean	Language Percentile Rank of Mean	Math NCE Mean	Math Percentile Rank of Mean	Total Battery NCE Mean	Total Battery Percentile Rank of Mean
Ashburton	425	3	26	67	79	75	88	71	84	73	86
		5	26	68	80	70	83	67	79	70	83
Ayrlawn	421	3	13	59	67	69	82	72	85	69	82
		5	13	68	80	76+	89	69	82	71	84
Bannockburn	420	3	29	67	79	78	91	73	86	73	86
		5	29	70	83	71	84	65-	76	71	84
Lucy Barnsley	505	3	54	67	70	73	86	65	76	68	80
		5	54	67	79	77	90	75+	88	75	88
Bells Mill	607	3	36	71	84	80	92	71	84	76	89
		5	36	70	83	81	93	73	86	77	90
Belmont	513	3	58	62	72	72	85	71	84	70	83
		5	58	67	79	79+	92	71	84	73	86
Bel Pre	780	3	27	46	42	54	58	53	56	51	52
		5	27	57+	63	69+	82	68+	80	65+	76
Bethesda	401	3	40	73	86	81	93	74	87	79	92
		5	40	73	86	78	91	75	88	78	91

TABLE 6 (CONTINUED)

SCHOOL LONGITUDINAL RESULTS FOR STUDENTS TESTED IN THE SAME SCHOOL IN GRADE 3 (ITBS, SPRING 1980) AND GRADE 5 (CAT, FALL 1981)

School	School Number	Grade	Number Tested	Reading Comprehension NCE Mean	Reading Comprehension Percentile Rank of Mean	Language NCE Mean	Language Percentile Rank of Mean	Math NCE Mean	Math Percentile Rank of Mean	Total Battery NCE Mean	Total Battery Percentile Rank of Mean
Beverly Farms	226	3	45	65	76	80	92	74	87	74	87
		5	45	68	80	72	85	71	84	72	85
Bradley	410	3	26	77	90	77	90	77	90	80	92
		5	26	74	87	79	92	74	87	79	92
Broad Acres	304	3	11	38	28	53	56	39	30	46	42
		5	11	49+	48	55	59	41	33	50	50
Brookhaven	807	3	53	57	63	69	82	65	76	64	75
		5	53	62	72	72	85	65	76	68	80
Brookmont	414	3	18	67	79	75	88	67	79	72	85
		5	18	73	86	80	92	76	89	79	92
Brown Station	559	3	49	61	70	66	78	61	70	64	75
		5	49	67	79	69	82	70	83	70	83
Burning Tree	419	3	50	72	85	79	92	81	93	80	92
		5	50	74	87	83	94	79	92	83	94
Burtonsville	302	3	33	60	68	71	84	65	76	67	79
		5	33	60	68	70	83	62	72	64	75

TABLE 6 (CONTINUED)

SCHOOL LONGITUDINAL RESULTS FOR STUDENTS TESTED IN THE SAME SCHOOL IN GRADE 3 (ITBS, SPRING 1980) AND GRADE 5 (CAT, FALL 1981)

School	School Number	Grade	Number Tested	Reading Comprehension NCE Mean	Reading Comprehension Percentile Rank of Mean	Language NCE Mean	Language Percentile Rank of Mean	Math NCE Mean	Math Percentile Rank of Mean	Total Battery NCE Mean	Total Battery Percentile Rank of Mean
Candlewood	508	3	56	65	76	70	83	68	80	70	83
		5	56	69	82	72	85	74	87	75	88
Cannon Road	310	3	46	60	68	71	84	64	75	67	79
		5	46	66	78	75	88	68	80	71	84
Carderock Springs	604	3	25	70	83	80	92	74	87	76	89
		5	25	70	83	74	87	74	87	75	88
Cashell	511	3	65	56	61	61	70	57	63	61	70
		5	65	63	73	64	75	68+	80	67	79
Cedar Grove	703	3	29	67	79	69	82	67	79	71	84
		5	29	69	82	75	88	73	86	74	87
Chevy Chase	403	3	46	64	75	71	84	65	76	69	82
		5	46	68	80	76	89	70	83	74	87
Clarksburg	101	3	31	58	65	62	72	57	63	60	68
		5	31	55	59	64	75	55	59	58	65
Cloverly	308	3	52	58	65	67	79	62	72	64	75
		5	52	61	70	70	83	64	75	66	78

TABLE 6 (CONTINUED)

SCHOOL LONGITUDINAL RESULTS FOR STUDENTS TESTED IN THE SAME SCHOOL IN GRADE 3 (ITBS, SPRING 1980) AND GRADE 5 (CAT, FALL 1981)

School	School Number	Grade	Number Tested	Reading Comprehension NCE Mean	Reading Comprehension Percentile Rank of Mean	Language NCE Mean	Language Percentile Rank of Mean	Math NCE Mean	Math Percentile Rank of Mean	Total Battery NCE Mean	Total Battery Percentile Rank of Mean
Cold Spring	238	3	58	64	75	71	84	66	78	69	82
		5	58	69	82	78+	91	74	87	76	89
College Gardens	229	3	67	68	80	73	86	70	83	73	86
		5	67	70	83	71	84	70	83	71	84
Congressional	218	3	17	50	50	67	79	65	76	61	70
		5	17	57	63	61	70	63	73	61	70
Connecticut Park	779	3	28	59	67	66	78	64	75	65	76
		5	28	64	75	64	75	65	76	67	79
Cresthaven	808	3	27	62	72	71	84	64	75	67	79
		5	27	64	75	70	83	65	76	67	79
Damascus	702	3	65	63	73	70	83	66	78	66	78
		5	65	61	70	68	80	65	76	66	78
Darnestown	351	3	44	66	78	76	89	74	87	73	86
		5	44	69	82	76	89	79	92	77	90
Diamond	570	3	80	65	76	71	84	70	83	70	83
		5	80	65	76	70	83	73	86	72	85

TABLE 6 (CONTINUED)

SCHOOL LONGITUDINAL RESULTS FOR STUDENTS TESTED IN THE SAME SCHOOL IN GRADE 3 (ITBS, SPRING 1980) AND GRADE 5 (CAT, FALL 1981)

School	School Number	Grade	Number Tested	Reading Comprehension NCE Mean	Reading Comprehension Percentile Rank of Mean	Language NCE Mean	Language Percentile Rank of Mean	Math NCE Mean	Math Percentile Rank of Mean	Total Battery NCE Mean	Total Battery Percentile Rank of Mean
Dufief	241	3	58	62	72	70	83	69	82	69	82
		5	58	64	75	71	84	73	86	71	84
Fairland	303	3	57	66	78	72	85	67	79	70	83
		5	57	67	79	72	85	67	79	70	83
Fallsmead	233	3	52	71	84	77	90	70	83	75	88
		5	52	71	84	78	91	74	87	76	89
Farmland	219	3	38	70	83	86	96	80	92	84	95
		5	38	73	86	81	93	81	93	81	93
Fields Road	566	3	36	60	68	69	82	61	70	65	76
		5	36	67	79	68	80	61	70	66	78
Flower Valley	506	3	35	63	73	70	83	64	75	68	30
		5	35	64	75	69	82	61	70	66	78
Forest Grove	768	3	17	67	79	76	89	78	91	74	87
		5	17	64	75	74	87	73	86	73	86
Forest Knolls	803	3	34	60	68	68	80	62	72	66	78
		5	34	63	73	72	85	70	83	71	84

TABLE 6 (CONTINUED)

SCHOOL LONGITUDINAL RESULTS FOR STUDENTS TESTED IN THE SAME SCHOOL IN GRADE 3 (ITBS, SPRING 1980) AND GRADE 5 (CAT, FALL 1981)

School	School Number	Grade	Number Tested	Reading Comprehension NCE Mean	Reading Comprehension Percentile Rank of Mean	Language NCE Mean	Language Percentile Rank of Mean	Math NCE Mean	Math Percentile Rank of Mean	Total Battery NCE Mean	Total Battery Percentile Rank of Mean
Four Corners	763	3	37	61	70	60	68	60	68	63	73
		5	37	65	76	66	78	69	82	67	79
Fox Chapel	106	3	49	66	78	77	90	76	89	72	85
		5	49	64	75	70	83	70	83	69	82
Gaithersburg	553	3	50	59	67	62	72	59	67	59	67
		5	50	60	68	65	76	62	72	62	72
Galway	313	3	35	61	70	73	86	67	79	67	79
		5	35	66	78	69	82	65	76	69	82
Garrett Park	204	3	17	58	65	71	84	65	76	66	78
		5	17	67	79	69	82	68	80	69	82
Georgetown Hill	221	3	52	70	83	77	90	74	87	76	89
		5	52	66	78	74	87	73	86	74	87
Georgian Forest	786	3	28	65	76	72	85	73	86	71	84
		5	28	71	84	75	88	76	89	77	90
Germantown	102	3	51	63	73	74	87	68	80	69	82
		5	51	65	76	65-	76	73	86	69	82

TABLE 6 (CONTINUED)

SCHOOL LONGITUDINAL RESULTS FOR STUDENTS TESTED IN THE SAME SCHOOL IN GRADE 3 (ITBS, SPRING 1980) AND GRADE 5 (CAT, FALL 1981)

School	School Number	Grade	Number Tested	Reading Comprehension NCE Mean	Reading Comprehension Percentile Rank of Mean	Language NCE Mean	Language Percentile Rank of Mean	Math NCE Mean	Math Percentile Rank of Mean	Total Battery NCE Mean	Total Battery Percentile Rank of Mean
Glen Haven	767	3	48	57	63	65	76	61	70	63	73
		5	48	59	67	59	67	59	67	59	67
Glenallan	817	3	35	56	61	66	78	63	73	63	73
		5	35	60	68	68	80	61	70	64	75
Greenwood	512	3	84	62	72	72	85	60	68	67	79
		5	84	62	72	68	80	63	73	66	78
Harmony Hills	797	3	46	55	59	64	75	57	63	58	65
		5	46	57	63	58	65	58	65	57	63
Highland	774	3	65	57	63	63	73	61	70	61	70
		5	65	58	65	61	70	64	75	63	73
Highland View	784	3	19	64	75	73	86	70	83	71	84
		5	19	63	73	68	80	67	79	67	79
Hungerford Park	214	3	43	62	72	73	86	63	73	69	82
		5	43	65	76	65	76	66	78	67	79
Jackson Road	305	3	59	66	78	74	87	68	80	70	83
		5	59	68	80	73	86	70	83	73	86

TABLE 6 (CONTINUED)

SCHOOL LONGITUDINAL RESULTS FOR STUDENTS TESTED IN THE SAME SCHOOL IN GRADE 3 (ITBS, SPRING 1980) AND GRADE 5 (CAT, FALL 1981)

School	School Number	Grade	Number Tested	Reading Comprehension NCE Mean	Reading Comprehension Percentile Rank of Mean	Language NCE Mean	Language Percentile Rank of Mean	Math NCE Mean	Math Percentile Rank of Mean	Total Battery NCE Mean	Total Battery Percentile Rank of Mean
Kemp Mill	805	3	25	73	86	90	97	88	96	89	97
		5	25	67-	79	76-	89	72-	85	74-	87
Kensington	751	3	22	66	78	74	87	69	82	69	82
		5	22	69	92	78	91	80+	92	77	90
Lake Normandy	231	3	61	70	83	75	88	71	84	75	88
		5	61	73	86	76	89	74	87	77	90
Lakewood	209	3	38	61	70	68	80	65	76	67	79
		5	38	67	79	73	86	65	76	69	82
Laytonsville	051	3	72	66	78	74	87	69	82	71	84
		5	72	64	75	74	87	75	88	74	87
Lone Oak	205	3	39	55	59	64	75	56	61	60	68
		5	39	55	59	57	63	56	61	57	63
Luxmanor	220	3	23	70	83	82	94	83	94	79	92
		5	23	72	85	83	94	82	94	82	94
Lynnbrook	409	3	18	61	70	59	67	55	59	61	70
		5	18	63	73	63	73	55	59	60	68

TABLE 6 (CONTINUED)

SCHOOL LONGITUDINAL RESULTS FOR STUDENTS TESTED IN THE SAME SCHOOL IN GRADE 3 (ITBS, SPRING 1980) AND GRADE 5 (CAT, FALL 1981)

School	School Number	Grade	Number Tested	Reading Comprehension NCE Mean	Reading Comprehension Percentile Rank of Mean	Language NCE Mean	Language Percentile Rank of Mean	Math NCE Mean	Math Percentile Rank of Mean	Total Battery NCE Mean	Total Battery Percentile Rank of Mean
Maryvale	210	3	46	47	44	45	41	42	35	43	37
		5	46	47	44	49	48	46	42	46	42
Meadow Hall	212	3	27	65	76	77	90	73	86	73	86
		5	27	62	72	71	84	64-	75	68	80
Mill Creek Towne	556	3	60	59	67	70	83	65	76	66	78
		5	60	60	68	64	75	70	83	67	79
Monocacy	652	3	25	53	56	59	67	52	54	56	61
		5	25	52	54	53	56	53	56	53	56
Montrose	225	3	17	49	48	70	83	60	68	62	72
		5	17	57	63	61-	70	57	63	57	63
North Chevy Chase	415	3	23	63	73	69	82	81	93	72	85
		5	23	69	82	70	83	67-	79	71	84
Oak View	766	3	31	49	48	53	56	50	50	52	54
		5	31	53	56	55	59	47	44	51	52
Oakland Terrace	769	3	49	62	72	68	80	64	75	68	80
		5	49	64	75	62	72	63	73	64	75

TABLE 6 (CONTINUED)

SCHOOL LONGITUDINAL RESULTS FOR STUDENTS TESTED IN THE SAME SCHOOL IN GRADE 3 (ITBS, SPRING 1980) AND GRADE 5 (CAT, FALL 1981)

School	School Number	Grade	Number Tested	Reading Comprehension NCE Mean	Reading Comprehension Percentile Rank of Mean	Language NCE Mean	Language Percentile Rank of Mean	Math NCE Mean	Math Percentile Rank of Mean	Total Battery NCE Mean	Total Battery Percentile Rank of Mean
Olney	502	3	50	65	76	71	84	67	79	70	83
		5	50	68	80	82+	94	69	82	73	86
William Tyler Page	312	3	21	72	85	78	91	71	84	74	87
		5	21	65-	76	72	85	69	82	71	84
Parkwood	783	3	20	63	73	71	84	61	70	67	79
		5	20	71	84	75	88	63	73	70	83
Pine Crest	761	3	41	60	68	69	82	59	67	64	75
		5	41	63	73	65	76	58	65	62	72
Pleasant View	765	3	21	57	63	68	80	62	72	64	75
		5	21	68+	80	70	83	64	75	68	80
Poolesville	153	3	70	58	65	63	73	58	65	62	72
		5	70	60	68	65	76	62	72	63	73
Potomac	601	3	65	67	79	79	92	74	87	76	89
		5	65	69	82	75	88	74	87	75	88
Radnor	416	3	10	75	88	80	92	74	87	81	93
		5	10	78	91	76	89	69	82	77	90

TABLE 6 (CONTINUED)

SCHOOL LONGITUDINAL RESULTS FOR STUDENTS TESTED IN THE SAME SCHOOL IN GRADE 3 (ITBS, SPRING 1980) AND GRADE 5 (CAT, FALL 1981)

School	School Number	Grade	Number Tested	Reading Comprehension NCE Mean	Reading Comprehension Percentile Rank of Mean	Language NCE Mean	Language Percentile Rank of Mean	Math NCE Mean	Math Percentile Rank of Mean	Total Battery NCE Mean	Total Battery Percentile Rank of Mean
Ritchie Park	227	3	54	69	82	81	93	72	85	77	90
		5	54	73	86	79	92	72	85	77	90
Rock Creek Forest	773	3	35	63	73	72	85	65	75	68	80
		5	35	68	80	72	85	67	79	70	83
Rock Creek Palisades	795	3	36	63	73	74	87	67	79	69	82
		5	36	66	78	69	82	68	80	69	82
Rock Creek Valley	819	3	43	63	73	75	88	70	83	70	83
		5	43	69	82	82+	94	79	92	78	91
Rocking Horse Road	785	3	29	49	48	63	73	53	56	57	63
		5	29	54	58	59	67	56	61	57	63
Rollingwood	411	3	26	66	78	73	86	62	72	70	83
		5	26	67	79	73	86	68	80	71	84
Rosemont	555	3	25	54	58	61	70	58	65	59	67
		5	25	62	72	64	75	56	61	60	68
Saddlebrook	821	3	30	63	73	69	82	67	79	70	83
		5	30	67	79	76+	89	71	84	74	87

TABLE 6 (CONTINUED)

SCHOOL LONGITUDINAL RESULTS FOR STUDENTS TESTED IN THE SAME SCHOOL IN GRADE 3 (ITBS, SPRING 1980) AND GRADE 5 (CAT, FALL 1981)

School	School Number	Grade	Number Tested	Reading Comprehension NCE Mean	Reading Comprehension Percentile Rank of Mean	Language NCE Mean	Language Percentile Rank of Mean	Math NCE Mean	Math Percentile Rank of Mean	Total Battery NCE Mean	Total Battery Percentile Rank of Mean
Seven Locks	603	3	35	70	83	77	90	73	86	76	89
		5	35	74	87	76	89	78	91	78	91
Sherwood	501	3	59	54	58	67	79	56	61	62	72
		5	59	63	73	67	79	63	73	65	76
Somerset	405	3	34	73	86	78	91	74	87	79	92
		5	34	77	90	77	90	81	93	83	94
South Lake	564	3	43	68	80	78	91	69	82	73	86
		5	43	68	80	70	83	63-	73	68	80
Stedwick	568	3	66	61	70	68	80	62	72	66	78
		5	66	66	78	71	84	68	80	70	83
Stonegate	316	3	30	62	72	68	80	67	79	67	79
		5	30	65	76	67	79	67	79	69	82
Strathmore	822	3	34	53	56	61	70	53	56	56	61
		5	34	60	68	59	67	56	61	59	67
Summit Hall	563	3	38	55	59	70	83	62	72	65	76
		5	38	63	73	66	78	66	78	66	78

TABLE 6 (CONTINUED)

SCHOOL LONGITUDINAL RESULTS FOR STUDENTS TESTED IN THE SAME SCHOOL IN GRADE 3 (ITBS, SPRING 1980) AND GRADE 5 (CAT, FALL 1981)

School	School Number	Grade	Number Tested	Reading Comprehension NCE Mean	Reading Comprehension Percentile Rank of Mean	Language NCE Mean	Language Percentile Rank of Mean	Math NCE Mean	Math Percentile Rank of Mean	Total Battery NCE Mean	Total Battery Percentile Rank of Mean
Travilah	216	3	40	65	76	71	84	64	75	68	80
		5	40	67	79	69	82	65	76	68	80
Twinbrook	206	3	38	47	44	60	68	49	48	54	58
		5	38	53	56	62	72	58	65	58	65
Viers Mill	772	3	39	58	65	68	80	63	73	63	73
		5	39	60	68	71	84	66	78	66	78
Washington Grove	552	3	35	58	65	69	82	60	68	63	73
		5	35	68	80	74	87	63	73	68	80
Watkins Mill	561	3	45	57	63	56	61	62	72	60	68
		5	45	63	73	67+	79	64	75	65	76
Wayside	235	3	52	65	76	76	89	71	84	72	85
		5	52	71	84	84+	95	79	92	81+	93
Weller Road	777	3	44	49	48	58	65	50	50	52	54
		5	44	55	59	54	58	53	56	54	58
West Rockville	207	3	26	62	72	66	78	61	70	65	76
		5	26	64	75	69	82	64	75	66	78

TABLE 6 (CONTINUED)

SCHOOL LONGITUDINAL RESULTS FOR STUDENTS TESTED IN THE SAME SCHOOL IN GRADE 3 (ITBS, SPRING 1980) AND GRADE 5 (CAT, FALL 1981)

School	School Number	Grade	Number Tested	Reading Comprehension NCE Mean	Reading Comprehension Percentile Rank of Mean	Language NCE Mean	Language Percentile Rank of Mean	Math NCE Mean	Math Percentile Rank of Mean	Total Battery NCE Mean	Total Battery Percentile Rank of Mean
Westbrook	408	3	31	70	83	72	85	66	78	73	86
		5	31	69	82	73	86	65	76	70	83
Westover	504	3	37	65	78	80	92	71	84	74	87
		5	37	70	83	75	88	74	87	75	88
Wheaton Woods	788	3	66	59	67	66	78	60	68	63	73
		5	66	57	63	62	72	58	65	60	68
Whetstone	558	3	50	68	80	77	90	73	86	75	88
		5	50	65	76	71	84	66-	78	70	83
Wood Acres	417	3	42	75	88	80	92	70	83	79	92
		5	42	71	84	77	90	76	89	77	90
Woodfield	704	3	65	66	78	78	91	73	86	75	88
		5	65	71	84	79	92	78	91	78	91
Wyngate	422	3	59	72	85	78	91	74	87	78	91
		5	59	75	88	79	92	73	86	78	91

TABLE 7
Schools With Substantial Longitudinal Trends in
Each of the Last Four Years - First Quarter

	1978-79					1979-80					1980-81					1981-82				
	No.	RC	TL	TM	C	No.	RC	TL	TM	C	No.	RC	TL	TM	TB	No.	RC	TL	TM	TB
Ashburton	19			▨	▨	15	▨		▨	▨	23		▨			26				
Bannockburn	29					48					33					29			▨	
Bells Mill	37					53					40					36				
Bethesda	22					35					39					40				
Beverly Farms	56					50			■		46					45				
Bradley	31					39	▨				33	▨				26				
Burning Tree	22					55					53					50				
Carderock Springs	38					42			▨		20					25				
College Gardens	44					45					58					67				
Darnestown	27		■			55					48					44				
Fallsmead	52					47					51			■		52				
Farmland	54					50					39	▨				38				
Forest Grove	22			▨		21			▨		24			▨	▨	17				
Georgetown Hill	42					40					67					52				
Kemp Mill	41		▨	▨	▨	40			▨	▨	37			▨	▨	25	▨	▨	▨	▨
Lake Normandy	55					60					67			■		61				
Luxmanor	44		■			36			■		30					23				
Meadow Hall	25					30			▨	▨	48			▨	▨	27			▨	
William Tyler Page	42					42					35					21	▨			
Potomac	68					54		▨		▨	78					65				
Radnor	12					13					17					10				
Ritchie Park	45					58					55					54				
Seven Locks	35					29					31					35				
Somerset	34					36					27			▨		34				
South Lake	22					35					46					43			▨	
Westbrook	32			■		42					35					31				
Westover	37		▨			58					58					37				
Whetstone	46					70					65			▨		50			▨	
Wood Acres	27					46		■			38					42				
Woodfield	43					41					56					65				
Wyngate	53					44					54					59				

■ - School longitudinal trend was at least 8 NCE points higher than the county trend.
▨ - School longitudinal trend was at least 8 NCE points lower than the county trend.

No. - Number Tested
TL - Total Language
C - Composite
RC - Reading Comprehension
TM - Total Math
TB - Total Battery

TABLE 7 (Continued)
Schools With Substantial Longitudinal Trends in
Each of the Last Four Years - Second Quarter

	1978-79					1979-80					1980-81					1981-82				
	No.	RC	TL	TM	C	No.	RC	TL	TM	C	No.	RC	TL	TM	TB	No.	RC	TL	TM	TB
Ayrlawn	–					16					17		■			13		■		
Belmont	52					73					61	■				58		■		
Brookmont	38					24		■	■		40					18				
Candlewood	59		■	■		45					70					56				
Cedar Grove	27					30					33	■	■			29				
Chevy Chase	54					56					50					46				
Cold Spring	62					91					65					58		■		
Diamond	62			▨		74					80					80				
Dufief	31					65					66					58				
Fairland	53			■		52					61					57				
Fox Chapel	56					47		▨			57					49			▨	
Georgian Forest	25		■	■	■	40					32					28				
Germantown	33		▨	▨		47					71		▨	▨		51		▨		
Highland View	33			■		34					35			▨		19				
Hungerford Park	17					50	▨			▨	49			▨		43				
Jackson Road	39			■		66			■		65					59				
Kensington	15					23					18					22			■	
Laytonsville	60					65					79					72				
North Chevy Chase	28	■	■		■	35		■			43					23			▨	
Olney	44					56					50					50		■		
Rock Creek Palisades	30					36					34					36				
Rock Creek Valley	42					64					56		■			43		■		
Rollingwood	31					15			▨		25					26				
Saddlebrook	45					48					31					30		■		
Wayside	57					61					55					52		■		■

■ - School longitudinal trend was at least 8 NCE points higher than the county trend.
▨ - School longitudinal trend was at least 8 NCE points lower than the county trend.

No. - Number Tested
TL - Total Language
C - Composite
RC - Reading Comprehension
TM - Total Math
TB - Total Battery

TABLE 7 (Continued)
Schools With Substantial Longitudinal Trends in
Each of the Last Four Years - Third Quarter

	1978-79					1979-80					1980-81					1981-82				
	No.	RC	TL	TM	C	No.	RC	TL	TM	C	No.	RC	TL	TM	TB	No.	RC	TL	TM	TB
Arcola	15					15					12					-				
Barnsley	59					52					41		■			54			■	
Brookhaven	48					31					51		■			53				
Brown Station	33					43					50					49				
Burtonsville	35					20	▨	▨	▨	▨	22					33				
Cannon Road	66					48					57					46				
Cloverly	49		■	■	■	52		■	■		72					52				
Connecticut Park	32					47					42					28				
Cresthaven	28					49					29					27				
Damascus	75		■			69					71					65				
Fields Road	15					31					23					36				
Flower Valley	68					60					61					35				
Forrest Knolls	38					26					21		■		■	34				
Galway	37		■	■		42		■	■		45					35				
Garrett Park	23					26					29					17				
Greenwood	74					85					87					84				
Lakewood	40					52					42					38				
Mill Creek Towne	57		▨			63					74					60				
Oakland Terrace	39					49					50					49				
Parkwood	29					18					23		■			20				
Pine Crest	22			▨		45					45					41				
Pleasant View	27	■		■	■	17					26					21	■			
Rock Creek Forest	-					-					23					35				
Stedwick	63					69					87					66				
Stonegate	42		■	■		42					52					30				
Summit Hall	45			▨		45					49			▨		38				
Travilah	33					38					43					40				
West Rockville	38					36					40					26				

■ - School longitudinal trend was at least 8 NCE points higher than the county trend.
▨ - School longitudinal trend was at least 8 NCE points lower than the county trend.

No. - Number Tested
TL - Total Language
C - Composite
RC - Reading Comprehension
TM - Total Math
TB - Total Battery

TABLE 7 (Continued)
Schools With Substantial Longitudinal Trends in
Each of the Last Four Years - Fourth Quarter

	1978-79					1979-80					1980-81					1981-82				
	No.	RC	TL	TM	C	No.	RC	TL	TM	C	No.	RC	TL	TM	TB	No.	RC	TL	TM	TB
Bel Pre	24					34					28					27	■	■	■	■
Broad Acres	15	■	■		■	16					19		■	▒		11	■			
Brookview	16			■		19					-					-				
Cashell	73	▒	▒	▒	▒	76					66	▒				65			■	
Clarksburg	23		▒			17					28					31				
Congressional	16		▒	▒	▒	11		▒	▒	▒	19			▒		17				
Four Corners	29		■	■		27			■		31					37				
Gaithersburg	37					45					50					50				
Glen Haven	35					47					39					48				
Glenallan	45					47					31					35				
Harmony Hills	50					43			▒		34					46				
Highland	45					51			■		77					65				
Lone Oak	31		▒			44					31					39				
Lynnbrook	13			■		16					11	■				18				
Maryvale	45					50		■			47					46				
Monocacy	27					16	▒				21					25				
Montrose	23		▒	▒	▒	20					13		▒	▒	▒	17		▒		
Oak View	23					27					34			■		31				
Poolesville	78					71					90					70				
Rocking Horse Road	38					39					32					29				
Rosemont	16					27					23				■	25				
Sherwood	59					67					53	■		■	■	59				
Strathmore	37					28					32					34				
Twinbrook	39					45					51			■		38				
Viers Mill	52					41					52					39				
Washington Grove	43					43					40					35				
Watkins Mill	58					51					39					45		■		
Weller Road	53					60					63					44				
Wheaton Woods	47					46					57					66				

■ - School longitudinal trend was at least 8 NCE points higher than the county trend.
▒ - School longitudinal trend was at least 8 NCE points lower than the county trend.

No. - Number Tested
TL - Total Language
C - Composite
RC - Reading Comprehension
TM - Total Math
TB - Total Battery

TABLE 8

RESULTS FOR STUDENTS TESTED IN PAIRED SCHOOLS IN GRADE 3
(ITBS, SPRING 1980) AND GRADE 5 (CAT, FALL 1981)

School	School No.	Grade	Number Tested	Reading Comprehension		Language		Math		Total Battery	
				NCE Mean	Percentile Rank of Mean	NCE Mean	Percentile Rank of Mean	NCE Mean	Percentile Rank of Mean	NCE Mean	Percentile Rank of Mean
East Silver Spring	756	3	21	55	59	63	73	56	61	60	68
Piney Branch	749	5	21	59	67	63	73	57	63	60	68
New Hampshire Estates	791	3	24	56	61	67	79	63	73	63	73
Brookview	307	5	24	48	46	56	61	56	61	54	58
Rolling Terrace	771	3	19	50	50	67	79	56	61	60	68
Oakview	766	5	19	59	67	64	75	58	65	60	68
Takoma Park	754	3	64	56	61	57	63	56	61	57	63
Piney Branch	749	5	64	58	65	56	61	53	56	56	61
Woodlin	764	3	33	57	63	60	68	52	54	56	61
Woodside	752	5	33	65	76	65	73	71	84	67	79

Nonlongitudinal Trends

Trends of scores between groups of students tested in a school only once (Grade 3 ITBS or Grade 5 CAT) are reported in Table 9. These nonlongitudinal data are analyzed in a way similar to the school longitudinal data. The county trend for students tested in a school only once (shown in Table 5) is used as a baseline against which to evaluate the magnitude of the school trend. For any school a trend substantially above (+) or below (-) the county trend is probably an indication of a population shift in the school. If either group in a school has fewer than 10 students, no results are reported for that school.

Table 10 contains a summary of four years of school nonlongitudinal analysis. This table has the same format as Table 7. No data are presented for a school in a year if there were fewer than 10 students in the third and/or fifth grade group.

TABLE 9

SCHOOL NONLONGITUDINAL RESULTS FOR STUDENTS TESTED IN A SCHOOL ONLY IN GRADE 3 (ITBS, SPRING 1980) OR GRADE 5 (CAT, FALL 1981)

School	School Number	Grade	Number Tested	Reading Comprehension NCE Mean	Reading Comprehension Percentile Rank of Mean	Language NCE Mean	Language Percentile Rank of Mean	Math NCE Mean	Math Percentile Rank of Mean	Total Battery NCE Mean	Total Battery Percentile Rank of Mean
Arcola	790	3	13	42	35	56	61	52	54	52	54
		5	13	54+	58	57	63	64+	75	57	63
Ashburton	425	3	13	73	86	74	87	72	85	74	87
		5	32	58-	65	62-	72	60-	68	61-	70
Bannockburn	420	3	11	67	79	77	90	71	84	73	86
		5	10	65	76	63-	73	65-	76	67	79
Barnsley	505	3	12	54	58	62	72	53	56	56	61
		5	31	67+	79	75+	88	69+	82	71+	84
Belmont	513	3	16	61	70	69	82	65	76	67	79
		5	10	67	79	76+	89	66	78	72	85
Beverly Farms	226	3	15	67	79	81	93	77	90	76	89
		5	14	75	88	83	94	87	96	84	95
Broad Acres	304	3	13	35	24	42	35	39	30	36	25
		5	17	48+	46	54+	58	51+	52	50+	50
Brookview	307	3	14	47	44	62	72	52	54	55	59
		5	40	46	42	53-	56	55	59	51	52
Brown Station	559	3	43	57	63	61	70	51	52	57	63
		5	27	61	70	70+	83	69+	82	67+	79
Burning Tree	419	3	10	64	75	75	88	78	91	73	86
		5	44	74	87	81	93	81	93	81	93

TABLE 9 (Continued)

SCHOOL NONLONGITUDINAL RESULTS FOR STUDENTS TESTED IN A SCHOOL ONLY IN GRADE 3 (ITBS, SPRING 1980) OR GRADE 5 (CAT, FALL 1981)

School	School Number	Grade	Number Tested	Reading Comprehension NCE Mean	Reading Comprehension Percentile Rank of Mean	Language NCE Mean	Language Percentile Rank of Mean	Math NCE Mean	Math Percentile Rank of Mean	Total Battery NCE Mean	Total Battery Percentile Rank of Mean
Candlewood	508	3	18	58	65	67	79	60	68	65	76
		5	15	60	68	66	78	65	76	66	78
Carderock Sp	604	3	11	78	91	90	97	90	97	90	97
		5	16	63-	73	69-	82	65-	76	67-	79
Cashell	511	3	11	52	54	53	56	49	48	53	56
		5	24	69+	82	69+	82	66+	78	69	82
Chevy Chase	403	3	16	64	75	69	82	61	70	68	80
		5	26	57-	63	63	73	65	76	63	73
Cold Spring	238	3	13	63	73	75	88	71	84	71	84
		5	15	69	82	79	92	70	83	75	88
College Gardens	229	3	25	54	58	66	78	64	75	64	75
		5	22	65	76	61	70	60-	68	63	73
Congressional	218	3	22	54	58	69	82	74	87	65	76
		5	15	58	65	62	72	68-	80	64	75
Diamond	570	3	24	66	78	73	86	63	73	69	82
		5	13	63	73	65	76	73	86	69	82
Dufief	241	3	21	61	70	65	76	64	75	64	75
		5	16	62	72	62	72	69	82	66	78
Fairland	303	3	15	56	61	64	75	58	65	60	68
		5	27	51-	52	54-	58	54	58	54	58

TABLE 9 (Continued)

SCHOOL NONLONGITUDINAL RESULTS FOR STUDENTS TESTED IN A SCHOOL ONLY IN GRADE 3 (ITBS, SPRING 1980) OR GRADE 5 (CAT, FALL 1981)

School	School Number	Grade	Number Tested	Reading Comprehension NCE Mean	Reading Comprehension Percentile Rank of Mean	Language NCE Mean	Language Percentile Rank of Mean	Math NCE Mean	Math Percentile Rank of Mean	Total Battery NCE Mean	Total Battery Percentile Rank of Mean
Fallsmead	233	3	11	62	72	70	83	63	73	69	82
		5	13	62	72	64	75	56-	61	62-	72
Fields Road	566	3	30	51	52	57	63	45	41	50	50
		5	13	63+	73	62	72	56	61	60+	68
Flower Valley	506	3	12	66	78	66	78	71	84	70	83
		5	55	66	78	73+	86	64-	75	68	80
Four Corners	763	3	10	41	33	42	35	40	32	39	30
		5	12	79+	92	75+	88	75+	88	77+	90
Fox Chapel	106	3	21	48	46	56	61	56	61	52	54
		5	28	56	61	61	70	58	65	59	67
Gaithersburg	553	3	40	52	54	51	52	51	52	50	50
		5	32	61	70	65+	76	62	72	63+	73
Garrett Park	204	3	13	52	54	65	76	51	52	56	61
		5	10	62	72	66	78	64+	75	65+	76
Georgetown Hill	221	3	27	61	70	69	82	63	73	66	78
		5	14	58	65	66	78	70	83	66	78
Georgian Forest	316	3	16	60	68	66	78	62	72	64	75
		5	27	56-	61	61	70	66	78	62	72
Germantown	102	3	26	52	54	62	72	54	58	55	59
		5	23	57	63	58	65	64	75	61	70

TABLE 9 (Continued)

SCHOOL NONLONGITUDINAL RESULTS FOR STUDENTS TESTED IN A SCHOOL ONLY IN GRADE 3 (ITBS, SPRING 1980) OR GRADE 5 (CAT, FALL 1981)

School	School Number	Grade	Number Tested	Reading Comprehension NCE Mean	Reading Comprehension Percentile Rank of Mean	Language NCE Mean	Language Percentile Rank of Mean	Math NCE Mean	Math Percentile Rank of Mean	Total Battery NCE Mean	Total Battery Percentile Rank of Mean
Glen Haven	767	3	26	53	56	65	76	60	68	60	68
		5	19	45-	41	49-	48	52-	54	48-	46
Glenallan	817	3	19	54	58	66	78	52	54	57	63
		5	12	53	56	56-	61	60	68	57	63
Greenwood	512	3	16	52	54	63	73	47	44	56	61
		5	13	59	67	63	73	60+	68	62	72
Harmony Hills	797	3	19	49	48	59	67	52	54	54	58
		5	21	46	42	50-	50	50	50	48	46
Highland	774	3	29	50	50	61	70	58	65	56	61
		5	21	46-	42	49-	48	50-	50	48-	46
Hungerford Park	214	3	27	51	52	63	73	58	65	58	65
		5	24	58	65	57	63	60	68	58	65
Jackson Road	305	3	31	63	73	69	82	63	73	66	78
		5	24	54-	58	56-	61	55-	59	55-	59
Lakewood	209	3	12	51	52	67	79	60	68	61	70
		5	10	66+	78	71	84	69	82	71+	84
Lone Oak	205	3	20	45	41	47	44	44	39	46	42
		5	10	54	58	53	56	58+	65	55+	59
Maryvale	210	3	14	42	35	34	22	37	27	37	27
		5	10	37-	27	45+	41	43	37	42	35

TABLE 9 (Continued)

SCHOOL NONLONGITUDINAL RESULTS FOR STUDENTS TESTED IN A SCHOOL ONLY IN GRADE 3 (ITBS, SPRING 1980) OR GRADE 5 (CAT, FALL 1981)

School	School Number	Grade	Number Tested	Reading Comprehension NCE Mean	Reading Comprehension Percentile Rank of Mean	Language NCE Mean	Language Percentile Rank of Mean	Math NCE Mean	Math Percentile Rank of Mean	Total Battery NCE Mean	Total Battery Percentile Rank of Mean
Meadow Hall	212	3	21	57	63	67	79	64	75	63	73
		5	15	53-	56	52-	54	46-	42	49-	48
Mill Ck Towne	556	3	12	59	67	67	79	60	68	63	73
		5	12	55-	59	58-	65	62	72	59	67
N Chevy Chase	415	3	16	66	78	73	86	78	91	75	88
		5	17	65	76	72	85	68-	80	70	83
Oak View	766	3	14	43	37	49	48	45	41	46	42
		5	52	56+	61	58+	65	56	61	56+	61
Oakland Terrace	769	3	12	67	79	71	84	66	78	69	82
		5	12	56-	61	59-	67	62-	72	60-	68
Olney	502	3	17	56	61	64	75	57	63	60	68
		5	13	52-	54	61	70	55	59	55	59
Parkwood	783	3	12	60	68	66	78	66	78	65	76
		5	22	58	65	61	70	52-	54	57-	63
Pine Crest	761	3	18	51	52	59	67	54	58	55	59
		5	17	46-	42	47-	44	44-	39	44-	39
Poolesville	153	3	20	58	65	60	68	58	65	61	70
		5	11	50-	50	53	56	46-	42	50-	50
Potomac	601	3	10	63	73	76	89	73	86	74	87
		5	17	70	83	76	89	75	88	74	87

TABLE 9 (Continued)

SCHOOL NONLONGITUDINAL RESULTS FOR STUDENTS TESTED IN A SCHOOL ONLY IN GRADE 3 (ITBS, SPRING 1980) OR GRADE 5 (CAT, FALL 1981)

School	School Number	Grade	Number Tested	Reading Comprehension NCE Mean	Reading Comprehension Percentile Rank of Mean	Language NCE Mean	Language Percentile Rank of Mean	Math NCE Mean	Math Percentile Rank of Mean	Total Battery NCE Mean	Total Battery Percentile Rank of Mean
Ritchie Park	227	3	13	62	72	74	87	69	82	70	83
		5	12	77+	90	75	88	73	86	76	89
Rock Ck Forest	773	3	11	49	48	61	70	54	58	55	59
		5	11	59	67	56	61	57	63	59	67
Rocking Horse Rd	785	3	25	45	41	54	58	50	50	50	50
		5	14	50	50	45-	41	47	44	46	42
Rosemont	555	3	14	45	41	52	54	53	56	51	52
		5	15	52	54	60+	68	58	65	55	59
Saddlebrook	821	3	10	56	61	64	75	63	73	62	72
		5	11	61	70	62	72	60	68	62	72
Sherwood	501	3	10	43	37	57	63	54	58	50	50
		5	18	61+	70	62	72	61	70	62+	72
South Lake	564	3	29	55	59	67	79	59	67	63	73
		5	20	58	65	59	67	55-	59	58	65
Stedwick	568	3	13	63	73	68	80	59	67	66	78
		5	36	61	70	65	76	66	78	64	75
Strathmore	822	3	24	48	46	52	54	43	37	49	48
		5	12	45	41	50	50	46	42	47	44
Summit Hall	563	3	34	55	59	64	75	59	67	61	70
		5	18	62	72	58	65	65	76	64	75

TABLE 9 (Continued)

SCHOOL NONLONGITUDINAL RESULTS FOR STUDENTS TESTED IN A SCHOOL ONLY IN GRADE 3 (ITBS, SPRING 1980) OR GRADE 5 (CAT, FALL 1981)

School	School Number	Grade	Number Tested	Reading Comprehension NCE Mean	Reading Comprehension Percentile Rank of Mean	Language NCE Mean	Language Percentile Rank of Mean	Math NCE Mean	Math Percentile Rank of Mean	Total Battery NCE Mean	Total Battery Percentile Rank of Mean
Travilah	216	3	16	61	70	63	73	62	72	64	75
		5	13	62	72	65	76	64	75	63	73
Twinbrook	206	3	24	55	59	61	70	52	54	55	59
		5	19	50-	50	53	56	54	58	53	56
Viers Mill	772	3	10	60	68	64	75	65	76	64	75
		5	11	56-	61	60	68	57-	63	56-	61
Watkins Mill	561	3	20	62	72	60	68	60	68	62	72
		5	21	60	68	67+	79	58	65	58	65
Wayside	235	3	10	61	70	70	83	62	72	66	78
		5	10	72	85	85+	95	74+	87	77+	90
Weller Road	777	3	25	48	46	60	68	47	44	52	54
		5	13	60+	68	62	72	61+	70	61+	70
West Rockville	207	3	12	52	54	60	68	44	39	51	52
		5	14	66+	78	66	78	55	59	60+	68
Westover	504	3	10	60	68	76	89	71	84	72	85
		5	10	69	82	65-	76	74	87	71	84
Wheaton Woods	788	3	12	44	39	48	46	46	42	46	42
		5	12	56+	61	60+	68	54	58	58+	65
Whetstone	558	3	24	69	82	79	92	71	84	75	88
		5	33	65-	76	66-	78	65-	76	66-	78

TABLE 9 (Continued)

SCHOOL NONLONGITUDINAL RESULTS FOR STUDENTS TESTED IN A SCHOOL ONLY IN GRADE 3 (ITBS, SPRING 1980) OR GRADE 5 (CAT, FALL 1981)

School	School Number	Grade	Number Tested	Reading Comprehension NCE Mean	Reading Comprehension Percentile Rank of Mean	Language NCE Mean	Language Percentile Rank of Mean	Math NCE Mean	Math Percentile Rank of Mean	Total Battery NCE Mean	Total Battery Percentile Rank of Mean
Wood Acres	417	3	15	56	61	66	78	54	58	61	70
		5	12	73+	86	72	85	71+	84	74+	87
Wyngate	422	3	14	73	86	77	90	72	85	77	90
		5	14	66-	78	69	82	69	82	68-	80

TABLE 10

Schools With Substantial Nonlongitudinal Trends in Each of the Last Four Years - First Quarter

	1978-79					1979-80					1980-81					1981-82				
	No.	RC	TL	TM	C	No.	RC	TL	TM	C	No.	RC	TL	TM	TB	No.	RC	TL	TM	TB
Ashburton	-					11/23					-					13/32				
Ayrlawn	-					-					-					-				
Bannockburn	12/18					13/14					14/13					11/10				
Bells Mill	17/22					11/14					-					-				
Beverly Farms	-					11/26					14/11					15/14				
Bradley	-					13/12					-					-				
Brookhaven	13/17					19/12					20/23					-				
Brookmont	-					13/10					-					-				
Burning Tree	-					13/39					-					10/44				
Carderock Springs	-					-					13/13					11/16				
Cloverly	12/21					14/11					15/13					-				
Cold Spring	29/13					23/17					17/14					13/15				
Cresthaven	10/18					-					-					-				
Damascus	-					16/23					14/16					-				
Darnestown	-					12/32					-					-				
Farmland	-					-					-					-				
Flower Valley	18/23					23/19					15/13					12/55				
Kemp Mill	-					-					-					-				
Lake Normandy	17/18					13/20					16/18					-				
N. Chevy Chase	16/20					-					-					16/17				
William Tyler Page	13/12					16/11					-					-				
Potomac	-					12/25					15/24					10/17				
Ritchie Park	14/26					22/16					-					13/12				
Rock Creek Palisades	19/16					15/15					18/15					10/11				
Somerset	18/43					17/35					16/24					-				
Westbrook	-					10/11					-					-				
Westover	-					-					12/16					10/10				
Whetstone	25/41					14/29					26/35					24/33				
Wyngate	25/17					16/27					-					14/14				

- School nonlongitudinal trend was at least 8 NCE points higher than the county trend.
- School nonlongitudinal trend was at least 8 NCE points lower than the county trend.

No. - Number Tested, Grade 3/Grade 5
TL - Total Language
C - Composite
RC - Reading Comprehension
TM - Total Math
TB - Total Battery

TABLE 10 (Continued)
Schools With Substantial Nonlongitudinal Trends in
Each of the Last Four Years - Second Quarter

	1978-79					1979-80					1980-81					1981-82				
	No.	RC	TL	TM	C	No.	RC	TL	TM	C	No.	RC	TL	TM	TB	No.	RC	TL	TM	TB
Belmont	26/15					26/13					11/11					16/10				
Bel Pre	14/18					-					11/13					-				
Candlewood	24/18					19/21					22/15					18/15				
Chevy Chase	12/53					35/31					18/29					16/26				
College Garden	38/46					19/53					33/25					25/22				
Congressional	12/21					16/12					-					22/15				
Connecticut Park	16/14					13/14					23/13					-				
Diamond	33/31					21/23					23/23					24/13				
Dufief	17/27					10/23					-					27/16				
Fallsmead	23/18					16/18					20/11					11/13				
Galway	15/15					-					-					-				
Georgetown Hill	-					18/42					18/19					27/14				
Georgian Forest	17/29					13/23					-					16/27				
Jackson Road	10/70					37/29					16/27					31/24				
Kensington	-					-					-					-				
Laytonsville	46/39					41/40					16/22					-				
Luxmanor	-					-					-					-				
Oakland Terrace	19/25					22/17					25/15					12/12				
Parkwood	14/13					-					13/17					12/22				
Pleasant View	15/16					21/13					11/13					-				
Radnor	19/15					10/21					11/10					-				
Rollingwood	11/17					13/17					-					-				
Stedwick	24/48					26/37					28/33					13/36				
Stonegate	15/10					-					-					-				
Travilah	-					-					-					16/13				
Viers Mill	27/24					20/22					15/12					10/11				
Wayside	26/18					20/17					16/14					10/10				

■ - School nonlongitudinal trend was at least 8 NCE points higher than the county trend.
▨ - School nonlongitudinal trend was at least 8 NCE points lower than the county trend.

No. - Number Tested, Grade3/Grade 5
TL - Total Language
C - Composite
RC - Reading Comprehension
TM - Total Math
TB - Total Battery

TABLE 10 (Continued)
Schools With Substantial Nonlongitudinal Trends in
Each of the Last Four Years - Third Quarter

	1978-79					1979-80					1980-81					1981-82				
	No.	RC	TL	TM	C	No.	RC	TL	TM	C	No.	RC	TL	TM	TB	No.	RC	TL	TM	TB
Barnsley	13/18					-					11/36					12/31				
Bethesda	17/16					14/18					-					-				
Brown Station	28/42					43/36					37/36					43/27				
Cannon Road	19/10					11/21					11/19					-				
Cedar Grove	22/11					24/15					-					-				
Fairland	24/17					17/26					19/25					15/27				
Forest Grove	17/11					-					-					-				
Forrest Knolls	-					-					11/16					-				
Garrett Park	-					-					-					13/10				
Glen Haven	10/26					17/30					19/20					26/19				
Glenallan	28/22					26/16					25/13					19/12				
Greenwood	25/15					15/15					23/18					16/13				
Highland	27/44					25/30					41/22					29/21				
Hungerford Park	-					30/15					23/10					27/24				
Lakewood	-					10/11					12/15					12/10				
Meadow Hall	-					19/18					17/17					21/15				
Mill Creek Towne	25/52					22/38					19/17					12/12				
Montrose	27/17					18/12					-					-				
Olney	24/13					21/15					-					17/13				
Poolesville	20/22					30/22					17/12					20/11				
Rock Creek Valley	21/35					28/17					11/18					12/16				
Saddlebrook	20/13					-					-					10/11				
Seven Locks	11/13					14/17					-					-				
South Lake	38/45					58/35					36/31					29/20				
Summit Hall	25/26					25/22					24/23					34/18				
Washington Grove	28/24					48/30					26/16					-				
Watkins Mill	38/24					34/40					30/29					20/21				
Wood Acres	13/19					18/21					18/17					15/12				
Woodfield	-					-					-					-				

▬ - School nonlongitudinal trend was at least 8 NCE points higher than the county trend.
▨ - School nonlongitudinal trend was at least 8 NCE points lower than the county trend.

No. - Number Tested, Grade 3/Grade 5
TL - Total Language
C - Composite
RC - Reading Comprehension
TM - Total Math
TB - Total Battery

TABLE 10 (Continued)
Schools With Substantial Nonlongitudinal Trends in
Each of the Last Four Years - Fourth Quarter

	1978-79					1979-80					1980-81					1981-82				
	No.	RC	TL	TM	C	No.	RC	TL	TM	C	No.	RC	TL	TM	TB	No.	RC	TL	TM	TB
Arcola	-					12/13					12/13					13/13				
Broad Acres	14/10					16/12					12/14					13/17				
Brookview	10/40					11/49					13/37					14/40				
Burtonsville	-					-					-					-				
Cashell	23/15					16/15					-					11/24				
Clarksburg	-					12/34					-					-				
Fields Road	26/31					23/15					23/24					30/13				
Four Corners	-					18/15					16/16					10/12				
Fox Chapel	36/21					32/23					23/18					21/28				
Gaithersburg	40/35					57/27					35/42					40/32				
Germantown	22/23					21/32					19/16					26/23				
Harmony Hills	23/21					35/22					29/24					19/21				
Highland View	17/16					19/19					11/37					-				
Lone Oak	12/15					-					-					20/10				
Lynnbrook	-					-					-					-				
Maryvale	64/70					28/18					13/10					14/10				
Monocacy	-					-					-					-				
Oak View	20/49					20/61					11/50					14/52				
Pine Crest	12/38					25/30					18/22					18/17				
Rock Creek Forest	-					-					-					11/11				
Rocking Horse Road	25/13					25/10					17/12					25/14				
Rosemont	13/14					-					13/20					14/15				
Sherwood	23/21					25/25					20/21					10/18				
Strathmore	22/15					18/23					20/23					24/12				
Twinbrook	18/13					26/12					23/17					24/19				
Weller Road	24/35					25/27					16/29					25/13				
West Rockville	-					-					16/13					12/14				
Wheaton Woods	18/28					23/30					14/19					12/12				

▰ - School nonlongitudinal trend was at least 8 NCE points higher than the county trend.
▨ - School nonlongitudinal trend was at least 8 NCE points lower than the county trend.

No. - Number Tested, Grade 3/Grade 5
TL - Total Language
C - Composite
RC - Reading Comprehension
TM - Total Math
TB - Total Battery

APPENDIX A

DATA TABLES

Table A1

NUMBER (N) AND PERCENTAGE (%) OF STUDENTS SCORING AT OR ABOVE THE NATIONAL NORM AVERAGE (50TH PERCENTILE) ON THE CALIFORNIA ACHIEVEMENT TESTS, FALL 1981

	GRADE							
	3		5		8		11	
	N	%	N	%	N	%	N	%
Total Battery	3984	77	5160	79	5672	78	5508	75
Total Reading	3925	75	5085	78	5778	79	5724	75
Total Language	4175	80	5383	82	5643	77	5698	75
Total Math	4029	77	5144	79	5796	80	5683	76

Table A2

CALIFORNIA ACHIEVEMENT TESTS RESULTS
FOR FALL 1980 AND 1981

(Scores reported are Normal Curve Equivalent (NCE) means, Scale (SS) means and the Percentile Rank (PR) of the Scale Score means)

		Grade 3			Grade 5		
Subject	Year	NCE Mean	SS Mean	PR of SS Mean	NCE Mean	SS Mean	PR of SS Mean
TOTAL BATTERY	1981	65	405	79	67	493	80
	1980	64	403	77	67	492	79
Phonic Analysis	1981	57	403	64	-	-	-
	1980	56	401	63	-	-	-
Structural Analysis	1981	62	413	73	-	-	-
	1980	61	410	71	-	-	-
Reading Vocabulary	1981	62	419	72	64	499	76
	1980	61	417	71	64	499	76
Reading Comprehension	1981	62	433	71	64	515	75
	1980	61	431	70	63	514	74
TOTAL READING	1981	62	411	72	64	502	77
	1980	61	409	71	64	502	77
Spelling	1981	60	458	69	60	538	70
	1980	60	458	69	60	537	69
Language Mechanics	1981	67	488	80	67	554	79
	1980	66	485	78	66	553	78
Language Expression	1981	62	466	73	66	544	80
	1980	62	464	72	66	542	80
TOTAL LANGUAGE	1981	66	470	81	68	546	82
	1980	65	467	79	68	544	81
Math Computation	1981	65	365	77	64	470	74
	1980	63	361	74	62	467	72
Math Concepts and Applications	1981	63	417	74	66	493	78
	1980	63	417	74	66	493	78
TOTAL MATH	1981	65	393	77	66	481	77
	1980	64	391	76	65	480	77
Reference Skills	1981	-	-	-	66	530	79
	1980				65	527	78

Table A3

CALIFORNIA ACHIEVEMENT TESTS RESULTS
FOR FALL 1980 AND 1981

(Scores reported are Normal Curve Equivalent (NCE) means, Scale (SS) means and the Percentile Rank (PR) of the Scale Score means)

		Grade 8			Grade 11		
Subject	Year	NCE Mean	SS Mean	PR of SS Mean	NCE Mean	SS Mean	PR of SS Mean
TOTAL BATTERY	1981	66	599	79	64	674	75
	1980	65	596	78	63	671	74
Reading Vocabulary	1981	64	591	76	62	667	71
	1980	64	588	75	61	666	71
Reading Comprehension	1981	65	604	76	62	664	72
	1980	64	601	75	62	662	71
TOTAL READING	1981	65	599	78	63	668	73
	1980	65	596	76	62	666	72
Spelling	1981	58	601	66	57	651	64
	1980	57	598	64	57	651	64
Language Mechanics	1981	65	620	78	62	660	72
	1980	65	620	78	61	656	70
Language Expression	1981	63	599	75	62	663	72
	1980	63	598	74	61	660	71
TOTAL LANGUAGE	1981	65	609	78	63	667	73
	1980	65	608	78	62	663	72
Math Computation	1981	64	605	75	61	661	70
	1980	61	596	72	60	658	69
Math Concepts and Applications	1981	67	600	80	64	673	74
	1980	67	599	79	63	671	73
TOTAL MATH	1981	66	601	79	63	670	73
	1980	65	596	76	62	667	72
Reference Skills	1981	65	598	76	62	665	72
	1980	64	595	75	62	665	72

TABLE A4

TEST RESULTS FOR STUDENTS TESTED IN MCPS TWICE
(LONGITUDINAL) AND ONCE (NONLONGITUDINAL) IN GRADES 3 AND 5*

Subject	Students Tested in MCPS Twice			Students Tested in MCPS Once		
	N	NCE Mean	Percentile Rank of Mean	N	NCE Mean	Percentile Rank of Mean
ITBS Vocabulary (Grade 3)	5431	64	74	1214	57	63
CAT Reading Vocabulary (Grade 5)	5431	65	76	1097	59	66
ITBS Reading Comprehenion (Grade 3)	5438	62	71	1215	55	60
CAT Reading Comprehension (Grade 5)	5438	64	75	1098	59	67
ITBS Spelling (Grade 3)	5425	67	79	1208	61	70
CAT Spelling (Grade 5)	5425	61	70	1099	56	61
ITBS Capitalization & Punctuation (Grade 3)	5431	69	82	1209	63	73
CAT Language Mechanics (Grade 5)	5431	68	80	1100	61	70
ITBS Language Usage (Grade 3)	5434	61	70	1207	56	62
CAT Language Expression (Grade 5)	5434	67	79	1100	62	71
ITBS Total Language (Grade 3)	5428	70	83	1205	63	73
CAT Total Language (Grade 5)	5428	70	83	1100	62	72
ITBS Total Math (Grade 3)	5421	65	76	1207	58	64
CAT Total Math (Grade 5)	5421	67	79	1100	62	71
ITBS Composite (Grade 3)	5389	67	79	1185	60	68
CAT Total Battery (Grade 5)	5389	68	81	1094	62	71

*These results are merely descriptive because two different test batteries were used. No evaluative information can be derived because score differences can simply be the result of using different tests.

TABLE A5

TEST RESULTS FOR STUDENTS TESTED IN MCPS TWICE
(LONGITUDINAL) AND ONCE (NONLONGITUDINAL) IN GRADES 5 AND 8*

Subject	Students Tested in MCPS Twice			Students Tested in MCPS Once		
	N	NCE Mean	Percentile Rank of Mean	N	NCE Mean	Percentile Rank of Mean
ITBS Vocabulary (Grade 5)	5746	59	67	1560	55	59
CAT Reading Vocabulary (Grade 8)	5746	66	78	1532	59	66
ITBS Reading Comprehenion (Grade 5)	5747	58	65	1560	53	56
CAT Reading Comprehension (Grade 8)	5747	66	78	1533	59	67
ITBS Spelling (Grade 5)	5743	60	69	1558	54	58
CAT Spelling (Grade 8)	5743	59	67	1537	53	53
ITBS Capitalization & Punctuation (Grade 5)	5746	62	71	1556	56	61
CAT Language Mechanics (Grade 8)	5746	67	79	1536	59	66
ITBS Language Usage (Grade 5)	5744	61	70	1557	55	60
CAT Language Expression (Grade 8)	5744	65	76	1535	58	65
ITBS Total Language (Grade 5)	5743	63	73	1554	56	62
CAT Total Language (Grade 8)	5743	67	79	1533	59	67
ITBS Total Math (Grade 5)	5723	63	73	1559	58	65
CAT Total Math (Grade 8)	5723	68	80	1533	61	70
ITBS Composite (Grade 5)	5679	63	73	1541	56	62
CAT Total Battery (Grade 8)	5679	68	81	1509	60	68

*These results are merely descriptive because two different test batteries were used. No evaluative information can be derived because score differences can simply be the result of using different tests.

TABLE A6

TEST RESULTS FOR STUDENTS TESTED IN MCPS TWICE
(LONGITUDINAL) AND ONCE (NONLONGITUDINAL) IN GRADES 9 AND 11*

Subject	Students Tested in MCPS Twice			Students Tested in MCPS Once		
	N	NCE Mean	Percentile Rank of Mean	N	NCE Mean	Percentile Rank of Mean
ITBS Vocabulary (Grade 9)	6507	57	63	1469	49	48
CAT Reading Vocabulary (Grade 11)	6507	63	73	1118	55	60
ITBS Reading Comprehenion (Grade 9)	6511	54	57	1480	47	44
CAT Reading Comprehension (Grade 11)	6511	63	73	1118	54	58
ITBS Spelling (Grade 9)	6480	54	57	1469	47	44
CAT Spelling (Grade 11)	6480	58	65	1107	52	53
ITBS Capitalization & Punctuation (Grade 9)	6471	56	62	1456	48	47
CAT Language Mechanics (Grade 11)	6471	63	73	1107	54	57
ITBS Language Usage (Grade 9)	6468	55	60	1470	48	46
CAT Language Expression (Grade 11)	6468	63	73	1096	55	60
ITBS Total Language (Grade 9)	6416	57	63	1439	48	46
CAT Total Language (Grade 11)	6416	64	75	1094	55	60
ITBS Total Math (Grade 9)	6354	56	62	1437	47	44
CAT Total Math (Grade 11)	6354	64	75	1058	57	63
ITBS Composite (Grade 9)	6057	58	64	1309	49	49
CAT Total Battery (Grade 11)	6057	65	76	1022	56	62

*These results are merely descriptive because two different test batteries were used. No evaluative information can be derived because score differences can simply be the result of using different tests.

Table A7

PERCENTAGE OF STUDENT SCORES THAT MAY HAVE BEEN INFLUENCED BY THE CEILING EFFECT* ON THE CALIFORNIA ACHIEVEMENT TESTS, FALL 1981

	Grade			
	3	5	8	11
TOTAL BATTERY	**	**	**	**
Phonic Analysis	32	-	-	-
Structural Analysis	50	-	-	-
Reading Vocabulary	57	26	16	24
Reading Comprehension	38	16	**	19
TOTAL READING	14	12	**	14
Spelling	26	18	11	12
Language Mechanics	36	17	23	23
Language Expression	39	25	13	18
TOTAL LANGUAGE	22	**	**	**
Math Computation	**	**	19	23
Math Concepts and Applications	8	**	**	22
TOTAL MATH	**	**	**	16
Reference Skills	-	48	30	44

*Students scoring within 1 Standard Error of Measurement of the maximum score. This is a reasonable range for possible score change due to careless error. These could be students who may have failed to achieve the maximum score because of careless errors.

**There is no ceiling effect for these subtests and totals because it is possible to score at the 99the percentile even if the student is 1 Standard Error of Measurement below the maximum score.

Table A8

CALIFORNIA ACHIEVEMENT TESTS RESULTS
BY RACIAL/ETHNIC GROUPS FOR FALL 1980 and 1981
GRADE 3

(Scores reported are Normal Curve Equivalent (NCE)
means and their Percentile Ranks (PR).)

	Asian		Black		Hispanic		White		Total	
	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR
TOTAL BATTERY										
1981	73	86	51	52	58	65	68	80	65	76
1980	71	84	49	48	57	63	67	79	64	75
Phonic Analysis										
1981	60	68	48	46	52	54	58	65	57	63
1980	60	68	46	42	52	54	58	65	56	61
Structural Analysis										
1981	66	78	53	56	57	63	64	75	62	72
1980	65	76	50	50	57	63	63	73	61	70
Reading Vocabulary										
1981	62	72	50	50	54	58	64	75	62	72
1980	63	73	47	44	54	58	64	75	61	70
Reading Comprehension										
1981	62	72	51	52	56	61	64	75	62	72
1980	63	73	49	48	54	58	63	73	61	70
TOTAL READING										
1981	65	76	50	50	56	61	65	76	62	72
1980	65	76	47	44	55	59	64	75	61	70
Spelling										
1981	68	80	53	56	53	56	61	70	60	68
1980	68	880	52	54	53	56	61	70	60	68
Language Mechanics										
1981	73	86	56	61	62	72	69	82	67	79
1980	72	85	53	56	61	70	68	82	66	78
Language Expression										
1981	62	72	52	54	56	61	65	76	62	72
1980	64	75	50	50	56	61	64	75	62	72
TOTAL LANGUAGE										
1981	69	82	54	58	60	68	69	82	66	78
1980	70	83	52	54	59	67	68	80	65	76
Math Computation										
1981	77	90	51	52	59	67	66	78	65	76
1980	73	86	48	46	58	65	64	75	63	73
Math Concepts and Applications										
1981	69	82	50	50	56	61	65	76	63	73
1980	68	80	49	48	55	59	65	76	63	73
TOTAL MATH										
1981	75	88	51	52	58	65	67	79	65	76
1980	72	85	49	48	57	63	66	78	64	75
Reference Skills										
1981	-		-		-		-		-	
1980	-		-		-		-		-	
NUMBER TESTED										
1981	368		688		181		3955		5197	
1980	320		740		165		4388		5616	

Table A9

CALIFORNIA ACHIEVEMENT TESTS RESULTS
BY RACIAL/ETHNIC GROUPS FOR FALL 1980 and 1981
GRADE 5

(Scores reported are Normal Curve Equivalent (NCE)
means and their Percentile Ranks (PR).)

	Asian		Black		Hispanic		White		Total	
	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR
TOTAL BATTERY										
1981	74	87	53	56	58	65	69	82	67	79
1980	73	86	51	52	61	70	69	82	67	79
Phonic Analysis										
1981	-	-	-	-	-	-	-	-	-	-
1980	-	-	-	-	-	-	-	-	-	-
Structural Analysis										
1981	-	-	-	-	-	-	-	-	-	-
1980	-	-	-	-	-	-	-	-	-	-
Reading Vocabulary										
1981	64	75	53	56	55	59	66	78	64	75
1980	66	78	51	52	58	65	66	78	64	75
Reading Comprehension										
1981	66	78	52	54	56	61	66	78	64	75
1980	64	75	50	50	59	67	65	76	63	73
TOTAL READING										
1981	66	78	52	54	56	61	67	79	64	75
1980	65	76	51	52	58	65	66	78	64	75
Spelling										
1981	67	79	53	56	53	56	61	70	60	68
1980	67	79	51	52	56	61	61	70	60	68
Language Mechanics										
1981	73	86	54	58	60	68	68	80	67	79
1980	73	86	52	54	62	72	68	80	66	78
Language Expression										
1981	69	82	54	58	57	63	69	82	66	78
1980	67	79	51	52	60	68	68	80	66	78
TOTAL LANGUAGE										
1981	73	86	55	59	59	67	71	84	68	80
1980	71	84	52	54	62	72	70	83	68	80
Math Computation										
1981	75	88	53	56	58	65	65	76	64	75
1980	74	87	50	50	60	68	64	75	62	72
Math Concepts and Applications										
1981	73	86	51	52	58	65	68	80	66	78
1980	72	85	50	50	62	72	68	80	66	78
TOTAL MATH										
1981	76	89	52	54	59	67	68	80	66	78
1980	75	88	50	50	62	72	67	79	65	76
Reference Skills										
1981	72	85	55	59	60	68	68	80	66	78
1980	71	84	53	56	62	72	67	79	65	76
NUMBER TESTED										
1981	459		820		236		4999		6524	
1980	358		856		216		5775		7214	

Table A10

CALIFORNIA ACHIEVEMENT TESTS RESULTS
BY RACIAL/ETHNIC GROUPS FOR FALL 1980 AND 1981
GRADE 8

(Scores reported are Normal Curve Equivalent (NCE)
means and their Percentile Ranks (PR).)

	Asian		Black		Hispanic		White		Total	
	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR
TOTAL BATTERY										
1981	71	84	50	50	59	67	69	82	66	78
1980	73	86	50	50	59	67	67	79	65	76
Phonic Analysis										
1981	-	-	-	-	-	-	-	-	-	-
1980	-	-	-	-	-	-	-	-	-	-
Structural Analysis										
1981	-	-	-	-	-	-	-	-	-	-
1980	-	-	-	-	-	-	-	-	-	-
Reading Vocabulary										
1981	64	75	49	48	57	63	67	79	64	75
1980	65	76	49	48	57	63	66	78	64	75
Reading Comprehension										
1981	66	78	51	52	57	63	67	79	65	76
1980	67	79	51	52	59	67	66	78	64	75
TOTAL READING										
1981	66	78	50	50	58	65	68	80	65	76
1980	67	79	50	50	59	67	67	79	65	76
Spelling										
1981	65	76	51	52	52	54	59	67	58	65
1980	65	76	50	50	52	54	58	65	57	63
Language Mechanics										
1981	68	80	52	54	59	67	68	80	65	76
1980	72	85	51	52	60	68	67	79	65	76
Language Expression										
1981	64	75	50	50	58	65	66	78	63	73
1980	66	78	50	50	58	65	65	76	63	73
Total Language										
1981	67	79	51	52	59	67	68	80	65	76
1980	70	83	50	50	59	67	67	79	65	76
Math Computation										
1981	76	89	51	52	59	67	65	76	64	75
1980	75	88	50	50	57	63	63	73	61	70
Math Concepts and Applications										
1981	74	87	52	54	60	68	69	82	67	79
1980	75	88	52	54	60	68	68	80	67	79
TOTAL MATH										
1981	76	89	51	52	60	68	68	80	66	78
1980	76	89	51	52	59	67	66	78	65	76
Reference Skills										
1981	69	82	53	56	59	67	66	78	65	76
1980	70	83	52	54	59	67	65	76	64	75
NUMBER TESTED										
1981	387		872		243		5710		7234	
1980	359		828		234		5878		7314	

Table A11

CALIFORNIA ACHIEVEMENT TESTS RESULTS
BY RACIAL/ETHNIC GROUPS FOR FALL 1980 AND 1981
GRADE 11

(Scores reported are Normal Curve Equivalent (NCE)
means and their Percentile Ranks (PR).)

	Asian		Black		Hispanic		White		Total	
	NCE	PR	NCE	PR	NCE	PR	NCE	PR	NCE	PR
TOTAL BATTERY										
1981	66	78	47	44	56	61	66	78	64	75
1980	66	78	44	39	55	59	65	76	63	73
Phonic Analysis										
1981	-	-	-	-	-	-	-	-	-	-
1980	-	-	-	-	-	-	-	-	-	-
Structural Analysis										
1981	-	-	-	-	-	-	-	-	-	-
1980	-	-	-	-	-	-	-	-	-	-
Reading Vocabulary										
1981	57	63	47	44	55	59	64	75	62	72
1980	58	65	44	39	55	59	64	75	61	70
Reading Comprehension										
1981	59	67	47	44	53	56	64	75	62	72
1980	59	67	44	39	53	56	64	75	62	72
TOTAL READING										
1981	58	65	47	44	55	59	65	76	63	73
1980	59	67	43	37	54	58	65	76	62	72
Spelling										
1981	61	70	48	46	53	56	58	65	57	63
1980	63	73	47	44	52	54	59	67	57	63
Language Mechanics										
1981	64	75	47	44	56	61	64	75	62	72
1980	64	75	45	41	53	56	63	73	61	70
Language Expression										
1981	60	68	47	44	54	58	64	75	62	72
1980	59	67	45	41	52	54	64	75	61	70
TOTAL LANGUAGE										
1981	63	73	47	44	56	61	65	76	63	73
1980	62	72	44	39	53	56	64	75	62	72
Math Computation										
1981	71	84	47	44	55	59	62	72	61	70
1980	70	83	45	41	55	59	62	72	60	68
Math Concepts and Applications										
1981	71	84	48	46	58	65	65	76	64	75
1980	71	84	45	41	58	65	65	76	63	73
TOTAL MATH										
1981	72	85	47	44	57	63	65	76	63	73
1980	72	85	45	41	56	61	64	75	62	72
Reference Skills										
1981	61	70	49	48	55	59	64	75	62	72
1980	63	73	48	46	54	58	64	75	62	72
NUMBER TESTED										
1981	353		758		248		5981		7350	
1980	338		784		263		6552		7951	

TABLE A12

CALIFORNIA ACHIEVEMENT TESTS
RESULTS FOR STUDENTS TESTED IN
MCPS TWICE - ASIAN

Subject	Spring 1980 Grade 3 (N=335)* NCE	PR	Fall 1981 Grade 5 (N=335) NCE	PR	Spring 1979 Grade 5 (N=238) NCE	PR	Fall 1981 Grade 8 (N=238) NCE	PR	Spring 1980 Grade 9 (N=242) NCE	PR	Fall 1981 Grade 11 (N=242) NCE	PR
ITBS Vocabulary	63	73			59	67			56	61		
CAT Reading Vocabulary			68	80			72	85			64	75
ITBS Reading Comprehension	62	72			60	68			55	59		
CAT Reading Comprehension			69	82			72	85			67	79
ITBS Spelling	74	87			70	83			62	72		
CAT Spelling			70	83			71	84			67	79
ITBS Capitalization and Punctuation	76	89			68	80			63	73		
CAT Language Mechanics			75	88			74	87			71	84
ITBS Language Usage	62	72			59	67			56	61		
CAT Language Expression			73	86			70	83			67	79
ITBS TOTAL LANGUAGE	76	89			69	82			62	72		
CAT TOTAL LANGUAGE			76	89			73	86			70	83
ITBS TOTAL MATH	71	84			71	84			65	76		
CAT TOTAL MATH			77	90			79	92			76	89
ITBS COMPOSITE	71	84			67	79			62	72		
CAT TOTAL BATTERY			77	90			77	90			73	86

*This is the number taking all subtests. The number might be slightly larger for each subtest.

TABLE A13

CALIFORNIA ACHIEVEMENT TESTS
RESULTS FOR STUDENTS TESTED IN
MCPS TWICE - BLACK

Subject	Spring 1980 Grade 3 (N=580)* NCE	PR	Fall 1981 Grade 5 (N=580) NCE	PR	Spring 1979 Grade 5 (N=594) NCE	PR	Fall 1981 Grade 8 (N=594) NCE	PR	Spring 1980 Grade 9 (N=545) NCE	PR	Fall 1981 Grade 11 (N=545) NCE	PR
ITBS Vocabulary	53	56			44	39			41	33		
CAT Reading Vocabulary			54	58			51	52			48	46
ITBS Reading Comprehension	50	50			42	35			38	28		
CAT Reading Comprehension			52	54			52	54			48	46
ITBS Spelling	62	72			50	50			43	37		
CAT Spelling			54	58			52	54			48	46
ITBS Capitalization and Punctuation	59	67			49	48			43	37		
CAT Language Mechanics			56	61			54	58			48	46
ITBS Language Usage	51	52			46	42			42	35		
CAT Language Expression			55	59			51	52			49	48
ITBS TOTAL LANGUAGE	59	67			49	48			42	35		
CAT TOTAL LANGUAGE			56	61			52	54			48	46
ITBS TOTAL MATH	50	50			45	41			39	30		
CAT TOTAL MATH			53	56			53	56			49	48
ITBS COMPOSITE	54	58			45	41			40	32		
CAT TOTAL BATTERY			54	58			52	54			49	48

*This is the number taking all subtests. The number might be slightly larger for each subtest.

TABLE A14

CALIFORNIA ACHIEVEMENT TESTS
RESULTS FOR STUDENTS TESTED IN
MCPS TWICE - HISPANIC

Subject	Spring 1980 Grade 3 (N=155)* NCE	PR	Fall 1981 Grade 5 (N=155) NCE	PR	Spring 1979 Grade 5 (N=135) NCE	PR	Fall 1981 Grade 8 (N=135) NCE	PR	Spring 1980 Grade 9 (N=159) NCE	PR	Fall 1981 Grade 11 (N=159) NCE	PR
ITBS Vocabulary	54	58			54	58			50	50		
CAT Reading Vocabulary			59	67			62	72			58	65
ITBS Reading Comprehension	53	56			53	56			48	46		
CAT Reading Comprehension			59	67			63	73			59	67
ITBS Spelling	62	72			56	61			51	52		
CAT Spelling			56	61			55	59			58	65
ITBS Capitalization and Punctuation	64	75			58	65			53	56		
CAT Language Mechanics			64	75			64	75			61	70
ITBS Language Usage	52	54			54	58			52	54		
CAT Language Expression			60	68			63	73			59	67
ITBS TOTAL LANGUAGE	63	73			58	65			53	56		
CAT TOTAL LANGUAGE			63	73			64	75			61	70
ITBS TOTAL MATH	57	63			58	65			50	50		
CAT TOTAL MATH			61	70			64	75			61	70
ITBS COMPOSITE	59	67			57	63			51	52		
CAT TOTAL BATTERY			61	70			64	75			61	70

*This is the number taking all subtests. The number might be slightly larger for each subtest.

TABLE A15

CALIFORNIA ACHIEVEMENT TESTS
RESULTS FOR STUDENTS TESTED IN
MCPS TWICE - WHITE

Subject	Spring 1980 Grade 3 (N=4311)* NCE	PR	Fall 1981 Grade 5 (N=4311) NCE	PR	Spring 1979 Grade 5 (N=4696) NCE	PR	Fall 1981 Grade 8 (N=4696) NCE	PR	Spring 1980 Grade 9 (N=5102) NCE	PR	Fall 1981 Grade 11 (N=5102) NCE	PR
ITBS Vocabulary	65	76			62	72			59	67		
CAT Reading Vocabulary			67	79			68	80			64	75
ITBS Reading Comprehension	64	75			60	68			56	61		
CAT Reading Comprehension			66	78			68	80			65	76
ITBS Spelling	68	80			61	70			55	59		
CAT Spelling			62	72			60	68			59	67
ITBS Capitalization and Punctuation	70	83			63	73			58	65		
CAT Language Mechanics			69	82			69	82			64	75
ITBS Language Usage	63	73			63	73			57	63		
CAT Language Expression			69	82			66	78			65	76
ITBS TOTAL LANGUAGE	71	84			65	76			58	65		
CAT TOTAL LANGUAGE			71	84			69	82			66	78
ITBS TOTAL MATH	67	79			65	76			58	65		
CAT TOTAL MATH			68	80			69	82			65	76
ITBS COMPOSITE	69	82			65	76			60	68		
CAT TOTAL BATTERY			70	83			70	83			67	79

*This is the number taking all subtests. The number might be slightly larger for each subtest.

TABLE A16

CALIFORNIA ACHIEVEMENT TESTS
RESULTS FOR STUDENTS TESTED IN
MCPS ONCE - ASIAN

Subject	Spring 1980 Grade 3 (N=54)* NCE	PR	Fall 1981 Grade 5 (N=117) NCE	PR	Spring 1979 Grade 5 (N=50) NCE	PR	Fall 1981 Grade 8 (N=147) NCE	PR	Spring 1980 Grade 9 (N=42) NCE	PR	Fall 1981 Grade 11 (N=106) NCE	PR
ITBS Vocabulary	56	61			51	52			46	42		
CAT Reading Vocabulary			54	58			53	56			41	33
ITBS Reading Comprehension	54	58			53	56			47	44		
CAT Reading Comprehension			60	68			54	58			40	32
ITBS Spelling	69	82			63	73			56	61		
CAT Spelling			58	65			56	61			47	44
ITBS Capitalization and Punctuation	71	84			61	70			55	59		
CAT Language Mechanics			65	76			59	67			49	48
ITBS Language Usage	57	63			55	59			51	52		
CAT Language Expression			60	68			54	58			44	39
ITBS TOTAL LANGUAGE	69	82			62	72			55	59		
CAT TOTAL LANGUAGE			64	75			57	63			46	42
ITBS TOTAL MATH	66	78			68	80			58	65		
CAT TOTAL MATH			74	87			72	85			63	73
ITBS COMPOSITE	65	76			60	68			53	56		
CAT TOTAL BATTERY			66	78			62	72			51	52

*This is the number taking all subtests. The number might be slightly larger for each subtest.

TABLE A17

CALIFORNIA ACHIEVEMENT TESTS
RESULTS FOR STUDENTS TESTED IN
MCPS ONCE - BLACK

Subject	Spring 1980 Grade 3 (N=166)* NCE	PR	Fall 1981 Grade 5 (N=233) NCE	PR	Spring 1979 Grade 5 (N=204) NCE	PR	Fall 1981 Grade 8 (N=270) NCE	PR	Spring 1980 Grade 9 (N=168) NCE	PR	Fall 1981 Grade 11 (N=177) NCE	PR
ITBS Vocabulary	45	41			41	33			34	22		
CAT Reading Vocabulary			51	52			46	42			44	39
ITBS Reading Comprehension	42	35			40	32			32	20		
CAT Reading Comprehension			50	50			48	46			44	39
ITBS Spelling	53	56			47	44			37	27		
CAT Spelling			50	50			48	46			46	42
ITBS Capitalization and Punctuation	50	50			45	41			36	25		
CAT Language Mechanics			51	52			47	44			44	39
ITBS Language Usage	45	41			43	37			34	22		
CAT Language Expression			52	54			47	44			44	39
ITBS TOTAL LANGUAGE	50	50			44	39			34	22		
CAT TOTAL LANGUAGE			51	52			47	44			44	39
ITBS TOTAL MATH	42	35			41	33			31	18		
CAT TOTAL MATH			50	50			49	48			44	39
ITBS COMPOSITE	44	39			40	32			32	20		
CAT TOTAL BATTERY			50	50			47	44			43	37

*This is the number taking all subtests. The number might be slightly larger for each subtest.

TABLE A18

CALIFORNIA ACHIEVEMENT TESTS
RESULTS FOR STUDENTS TESTED IN
MCPS ONCE - HISPANIC

Subject	Spring 1980 Grade 3 (N=47)* NCE	PR	Fall 1981 Grade 5 (N=78) NCE	PR	Spring 1979 Grade 5 (N=47) NCE	PR	Fall 1981 Grade 8 (N=106) NCE	PR	Spring 1980 Grade 9 (N=56) NCE	PR	Fall 1981 Grade 11 (N=78) NCE	PR
ITBS Vocabulary	44	39			52	54			44	39		
CAT Reading Vocabulary			46	42			52	54			51	52
ITBS Reading Comprehension	44	39			50	50			44	39		
CAT Reading Comprehension			48	46			51	52			43	37
ITBS Spelling	55	59			53	56			47	44		
CAT Spelling			46	42			47	44			45	41
ITBS Capitalization and Punctuation	60	68			55	59			50	50		
CAT Language Mechanics			53	56			52	54			47	44
ITBS Language Usage	49	48			51	52			47	44		
CAT Language Expression			52	54			52	54			45	41
ITBS TOTAL LANGUAGE	57	63			54	58			49	48		
CAT TOTAL LANGUAGE			53	56			52	54			46	42
ITBS TOTAL MATH	50	50			55	59			45	41		
CAT TOTAL MATH			55	59			55	59			50	50
ITBS COMPOSITE	52	54			54	58			47	44		
CAT TOTAL BATTERY			52	54			53	56			48	46

*This is the number taking all subtests. The number might be slightly larger for each subtest.

TABLE A19

CALIFORNIA ACHIEVEMENT TESTS
RESULTS FOR STUDENTS TESTED IN
MCPS ONCE - WHITE

Subject	Spring 1980 Grade 3 (N=912)* NCE	PR	Fall 1981 Grade 5 (N=664) NCE	PR	Spring 1979 Grade 5 (N=1236) NCE	PR	Fall 1981 Grade 8 (N=980) NCE	PR	Spring 1980 Grade 9 (N=1040) NCE	PR	Fall 1981 Grade 11 (N=660) NCE	PR
ITBS Vocabulary	60	68			57	63			52	54		
CAT Reading Vocabulary			64	75			64	75			61	70
ITBS Reading Comprehension	58	65			56	61			49	48		
CAT Reading Comprehension			63	73			64	75			61	70
ITBS Spelling	62	72			55	59			48	46		
CAT Spelling			58	65			55	59			55	59
ITBS Capitalization and Punctuation	65	76			57	63			50	50		
CAT Language Mechanics			64	75			62	72			58	65
ITBS Language Usage	58	65			58	65			50	50		
CAT Language Expression			66	78			62	72			61	70
ITBS TOTAL LANGUAGE	65	76			59	67			50	50		
CAT TOTAL LANGUAGE			67	79			63	73			61	70
ITBS TOTAL MATH	61	70			58	65			49	48		
CAT TOTAL MATH			65	76			63	73			60	68
ITBS COMPOSITE	63	73			59	67			52	54		
CAT TOTAL BATTERY			66	78			64	75			61	70

*This is the number taking all subtests. The number might be slightly larger for each subtest.

TABLE A20

CALIFORNIA ACHIEVEMENT TESTS RESULTS
BY RACE FOR 1981 MCPS TESTING AND THE NATIONAL NORM GROUP

(Scores reported are the normal curve equivalent (NCE) scores for the mean raw scores.)

	BLACK			HISPANIC			OTHER		
	MCPS	NAT'1	DIFF	MCPS	NAT'1	DIFF	MCPS	NAT'1	DIFF
GRADE 3									
TOTAL BATTERY	49	29	20	55	35	20	64	48	16
TOTAL READING	48	29	19	52	34	18	59	48	11
TOTAL LANGUAGE	51	32	19	56	39	17	64	50	14
TOTAL MATH	52	32	20	58	39	19	66	50	16
GRADE 5									
TOTAL BATTERY	51	34	17	55	37	18	66	50	16
TOTAL READING	51	34	17	53	36	17	62	49	13
TOTAL LANGUAGE	51	35	16	56	38	18	66	53	13
TOTAL MATH	52	34	18	58	38	20	66	50	16
GRADE 8									
TOTAL BATTERY	50	33	17	58	39	19	66	51	15
TOTAL READING	51	37	14	56	42	14	65	54	11
TOTAL LANGUAGE	47	35	12	56	42	14	64	52	12
TOTAL MATH	52	31	21	59	38	21	66	50	16

Table A21

PERCENTAGE OF STUDENTS TESTED
BY RACIAL/ETHNIC GROUPS
CALIFORNIA ACHIEVEMENT TESTS
1980 AND 1981

	Asian		Black		Hispanic		White		Total	
	N	%	N	%	N	%	N	%	N	%
GRADE 3										
1981	368	77	688	92	181	68	3955	96	5197	93
1980	320	79	740	95	165	66	4388	96	5616	94
GRADE 5										
1981	459	84	820	95	236	81	4999	98	6524	96
1980	358	81	856	97	216	80	5775	98	7214	97
GRADE 8										
1981	387	88	872	95	243	80	5710	97	7234	96
1980	359	85	828	94	234	81	5878	96	7314	95
GRADE 11										
1981	353	75	758	85	248	74	5981	89	7350	87
1980	338	79	784	80	263	72	6552	88	7951	86

Table A22

CALIFORNIA ACHIEVEMENT TESTS RESULTS
BY SEX FOR FALL 1980 AND 1981
GRADE 3

(Scores reported are Normal Curve Equivalent (NCE)
means and their Percentile Ranks (PR).)

	MALE		FEMALE		TOTAL	
	NCE	PR	NCE	PR	NCE	PR
TOTAL BATTERY						
1981	65	76	66	78	65	76
1980	63	73	65	76	64	75
Phonic Analysis						
1981	56	61	58	65	57	63
1980	55	59	57	63	56	61
Structural Analysis						
1981	61	70	63	73	62	72
1980	59	67	62	72	61	70
Reading Vocabulary						
1981	61	70	62	72	62	72
1980	61	70	62	72	61	70
Reading Comprehension						
1981	60	68	63	73	62	72
1980	59	67	63	73	61	70
TOTAL READING						
1981	61	70	64	75	62	72
1980	60	68	63	73	61	70
Spelling						
1981	58	65	63	73	60	68
1980	58	65	63	73	60	68
Language Mechanics						
1981	65	76	70	83	67	79
1980	64	75	69	82	66	78
Language Expression						
1981	61	70	64	75	62	72
1980	60	68	64	75	62	72
TOTAL LANGUAGE						
1981	64	75	69	82	66	78
1980	63	73	68	80	65	76
Math Computation						
1981	65	76	64	75	65	76
1980	63	73	62	72	63	73
Math Concepts and Applications						
1981	63	73	63	73	63	73
1980	63	73	62	72	63	73
TOTAL MATH						
1981	65	76	64	75	65	76
1980	64	75	63	73	64	75
Reference Skills						
1981	-	-	-	-	-	-
1980	-	-	-	-	-	-
NUMBER TESTED						
1981	2618		2579		5197	
1980	2871		2745		5616	

Table A23

CALIFORNIA ACHIEVEMENT TESTS RESULTS
BY SEX FOR FALL 1980 AND 1981
GRADE 5
(Scores reported are Normal Curve Equivalent (NCE)
means and their Percentile Ranks (PR).)

	MALE		FEMALE		TOTAL	
	NCE	PR	NCE	PR	NCE	PR
TOTAL BATTERY						
1981	66	78	68	80	67	79
1980	66	78	67	79	67	79
Phonic Analysis						
1981	-	-	-	-	-	-
1980	-	-	-	-	-	-
Structural Analysis						
1981	-	-	-	-	-	-
1980	-	-	-	-	-	-
Reading Vocabulary						
1981	65	76	64	75	64	65
1980	65	76	64	75	64	75
Reading Comprehension						
1981	63	73	64	75	64	75
1980	62	72	64	75	63	73
TOTAL READING						
1981	64	75	65	76	64	65
1980	64	75	64	75	64	65
Spelling						
1981	59	67	62	72	60	68
1980	59	67	62	72	60	68
Language Mechanics						
1981	64	75	69	82	67	79
1980	64	75	68	80	66	78
Language Expression						
1981	64	75	69	82	66	78
1980	63	73	68	80	66	78
TOTAL LANGUAGE						
1981	66	78	71	84	68	80
1980	65	76	70	83	68	80
Math Computation						
1981	63	73	65	76	64	75
1980	61	70	64	75	62	72
Math Concepts and Applications						
1981	67	79	65	76	66	78
1980	67	79	65	76	66	78
TOTAL MATH						
1981	66	78	66	78	66	78
1980	65	76	65	76	65	76
Reference Skills						
1981	65	76	67	79	66	78
1980	65	76	66	78	65	76
NUMBER TESTED						
1981	3277		3247		6524	
1980	3659		3555		7214	

Table A24

CALIFORNIA ACHIEVEMENT TESTS RESULTS
BY SEX FOR FALL 1980 AND 1981
GRADE 8

(Scores reported are Normal Curve Equivalent (NCE)
means and their Percentile Ranks (PR).)

	MALE		FEMALE		TOTAL	
	NCE	PR	NCE	PR	NCE	PR
TOTAL BATTERY						
1981	64	75	67	79	66	78
1980	64	75	67	79	65	76
Phonic Analysis						
1981	-	-	-	-	-	-
1980	-	-	-	-	-	-
Structural Analysis						
1981	-	-	-	-	-	-
1980	-	-	-	-	-	-
Reading Vocabulary						
1981	66	78	63	73	64	75
1980	64	75	63	73	64	75
Reading Comprehension						
1981	64	75	66	78	65	76
1980	63	73	65	76	64	75
TOTAL READING						
1981	66	78	65	76	65	76
1980	65	76	65	76	65	76
Spelling						
1981	55	59	61	70	58	65
1980	54	58	61	70	57	63
Language Mechanics						
1981	62	72	68	80	65	76
1980	62	72	69	82	65	76
Language Expression						
1981	61	70	66	78	63	73
1980	60	68	66	78	63	73
TOTAL LANGUAGE						
1981	62	72	68	80	65	76
1980	62	72	69	82	65	76
Math Computation						
1981	62	72	66	78	64	75
1980	59	67	64	75	61	70
Math Concepts and Applications						
1981	68	80	66	78	67	79
1980	67	79	66	78	67	79
TOTAL MATH						
1981	65	76	67	79	66	78
1980	64	75	66	78	65	76
Reference Skills						
1981	63	73	66	78	65	76
1980	62	72	65	76	64	75
NUMBER TESTED						
1981	3573		3796		7234	
1980	3664		3650		7314	

Table A25

CALIFORNIA ACHIEVEMENT TESTS RESULTS
BY SEX FOR FALL 1980 AND 1981
GRADE 11

(Scores reported are Normal Curve Equivalent (NCE)
means and their Percentile Ranks (PR).)

	MALE		FEMALE		TOTAL	
	NCE	PR	NCE	PR	NCE	PR
TOTAL BATTERY						
1981	62	72	65	76	64	75
1980	62	72	64	75	63	73
Phonic Analysis						
1981	-	-	-	-	-	-
1980	-	-	-	-	-	-
Structural Analysis						
1981	-	-	-	-	-	-
1980	-	-	-	-	-	-
Reading Vocabulary						
1981	61	70	62	72	62	72
1980	61	70	61	70	61	70
Reading Comprehension						
1981	61	70	63	73	62	72
1980	61	70	62	72	62	72
TOTAL READING						
1981	62	72	63	73	63	73
1980	62	72	62	72	62	72
Spelling						
1981	53	56	61	70	57	63
1980	54	58	61	70	57	63
Language Mechanics						
1981	58	65	65	76	62	72
1980	58	65	64	75	61	70
Language Expression						
1981	60	68	64	75	62	72
1980	59	67	63	73	61	70
TOTAL LANGUAGE						
1981	60	68	66	78	63	73
1980	59	67	65	76	62	72
Math Computation						
1981	60	68	61	70	61	70
1980	60	68	60	68	60	68
Math Concepts and Applications						
1981	65	76	62	72	64	75
1980	65	76	62	72	63	73
TOTAL MATH						
1981	63	73	62	72	63	73
1980	63	73	62	72	62	72
Reference Skills						
1981	61	70	63	73	62	72
1960	61	70	63	73	62	72
NUMBER TESTED						
1981	3612		3738		7350	
1980	3936		4015		7951	

APPENDIX B

TECHNICAL TESTING TERMS

The following section provides a reference for the technical testing terms used throughout this report. The terms are defined; their uses are stated; and precautions about their interpretation are provided. The terms are listed in alphabetical order.

CRITERION-REFERENCED TEST (CRT)

Definition

A test based on specific learning objectives (or teaching objectives), usually within a narrow range of subject matter or skills. The tests are designed to measure the knowledge or skills the student has attained. The Maryland Functional Reading Test (MFRT) is an example of a CRT.

Use

CRTs provide information about the extent to which the student has attained the learning objective(s).

Precaution(s)

1. CRTs are often designed so a student can answer all or almost all of the questions correctly or incorrectly depending on the extent to which the student has attained the skills being measured. They are not designed to yield information about different levels of achievement and, therefore, cannot usually be used to rank students on specific skills.

2. To be useful measures of specific skills, CRTs must have a sufficient number of questions measuring each particular skill included on the test. Although what is "sufficient" is not a fixed number, there should, in most cases, be at least five questions which measure a skill. A test purporting to be a CRT which has fewer than five questions per skill should be viewed with skepticism.

GRADE EQUIVALENT SCORES (GE)

Definition

The grade equivalent of a given raw score on any test estimates the grade level at which the typical pupil achieves this raw score. The digit(s) to the left of the decimal point represent the grade; the digit to the right

of the decimal point represents the month within the grade according to the following table:

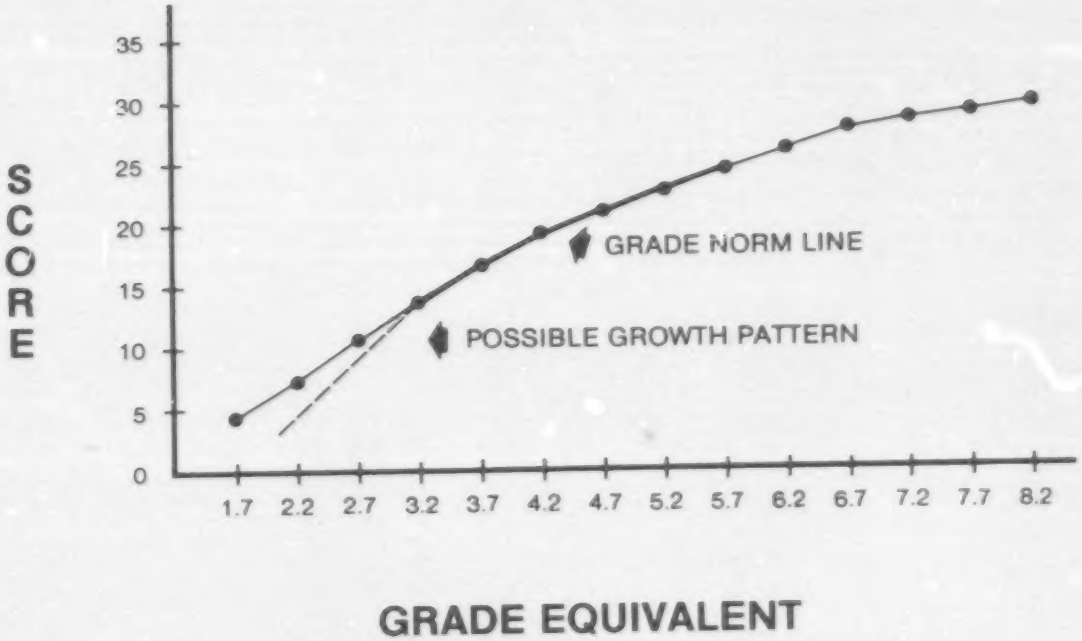
Number	Month
0	September
1	October
2	November
3	December
4	January
5	February
6	March
7	April
8	May
9	June-August

An example of how a test publisher might derive grade equivalents can be useful in understanding GE. The example presented below represents the best methodology currently in use. Many tests are normed with fewer samples.

If the publisher is norming a fourth grade test, he will test a representative sample in Grades 3, 4, and 5. In each grade, the sample, or two comparable samples, will be tested in the fall (November) and the spring (April). Thus, the grade levels being tested as 3.2, 3.7, 4.2, 4.7, 5.2, and 5.7. (Often publishers test only once a year.)

The average raw test score for the students in each group is computed and plotted on a graph similar to the one below. The mean scores are indicated by "." on the graph. All other grade-and-month values are estimated by interpolation between the means and extrapolation beyond the means. The GEs beyond the grade range of students in the norming sample should be regarded as no better than rough estimates.

Figure B1



Use

GEs provide a familiar referent for test scores.

Precautions

1. The grade equivalent score does not indicate the grade level of work that a student can perform. It simply estimates the grade level of the typical student in the norming sample achieving a given raw score. For example, suppose a fourth grade student has a score with a grade equivalent of 5.4 on a fourth grade test. This does not mean that a fourth grade student can do work which is done in January in the fifth grade. It simply estimates that this student did as well on a fourth grade test as the typical student in January of the fifth grade. However, remember that if the norming sample for the fourth grade test did not include any fifth grade students, this estimate is very tentative.

2. Grade equivalent scores should not be added and subtracted, because they are not an equal distance apart at all points. They are developed under an assumption that learning occurs equally during the school year. In fact, students tend to learn more at different times in the year. From a strict statistical point of view, this lack of equal score intervals means that mean GE scores should not be computed. However, if the GE scores are converted to Normal Curve Equivalent scores which do have this equal interval quality, the mean score computed from the converted scores is generally very close to that computed from the GEs, especially if the grade equivalents represent a wide range of possible scores.

3. The attempt to build a scale based on the assumption of equal learning cited in Number 2 above results in differential GE gains for raw score changes. What occurs is that a one raw score point change may cause a one-month change in GE at one place in the norm table and a five-month gain elsewhere. The largest changes in GE generally happen in the extremes of score distribution.

   An example of the unequal GE differences between raw scores is shown below. These scores are taken from the ITBS seventh grade spelling test.

Grade	Test	Raw Score	Grade Equivalent	Difference in Grade Equiv.
7	Spelling	7	3.5	
7		8	4.0	.5
7		9	4.4	.4
7	Spelling	25	8.4	
7		26	8.5	.1
7		27	8.7	.2

4. Grade equivalents generally have a wider range at higher grade levels. This leads to the situation that a student who has the same PR in Grades 3 and 5 will probably be further above (or below) the median in GE terms in Grade 5. This means that if he/she has a high PR in both grades, the gain in GE terms will be more than two years. If he/she has a low PR, the gain will be less than two GEs. Therefore, if a constant expected GE gain were established for all students, it would be too high for some and too low for others. The example below from ITBS norms demonstrates this problem.

PR	Grade 3	Grade 5	Grade Equivalent Change
90	5.1	7.5	2.4
50	3.6	5.6	2.0
10	2.6	4.1	1.5

5. Because a grade equivalent score represents the performance of a typical student at a given grade level, approximately half of the students in a nationwide sample would be expected to score below grade level.

6. Grade equivalents should not be compared across subject areas as they have different meanings. For example, mathematics is more grade-related than reading; and, therefore, the GEs are generally less spread out for math than for reading.

7. Grade equivalents should not be compared across different tests because they may have different meanings due to different norming samples.

INTERQUARTILE RANGE

Definition

Quartiles are scores (points in a distribution) that divide a score distribution into quarters. Twenty-five percent of the scores are at or below the first quartile (Q1), 50 percent are at or below the second quartile (Q2, which is also the median), and 75 percent are at or below the third quartile (Q3). The interquartile range includes the band of scores that lies between Q1 and Q3, or the middle 50 percent of the scores.

Use

By eliminating the effect of the lowest and highest quarters of the distribution, the interquartile range provides a measure of how the typical students in a group performed.

Precaution(s)

Eliminating the extreme scores may be removing important information such as the location of pockets of students needing compensatory or gifted programs. If the median is close to either quartile, it could indicate a large number of students at that end of the distribution who might require such services.

MEAN

Definition

The sum of the scores divided by the number of scores.

Use

The mean is used as a measure of the performance of the "typical" student in a group.

Precaution

1. In a small group, the mean can be overly influenced by a few extreme scores. Thus, if a few scores in a distribution are very low but most are quite high, the mean will be depressed by the low scores more than the median. In groups where there are a few extremely low scores, the mean will, therefore, be lower than the median. Therefore, it is often useful to compare the mean with the median.

2. Use of the mean provides no information about the spread of scores.

MEDIAN

Definition

The score that divides a test score distribution in half is known as the median. Half of the scores are above the median, half are below. The median is the score that has a percentile rank of 50.

Use

The median is used as a measure of the performance of the "typical" student in a group.

Precaution(s)

1. See Precaution 1 for "mean."

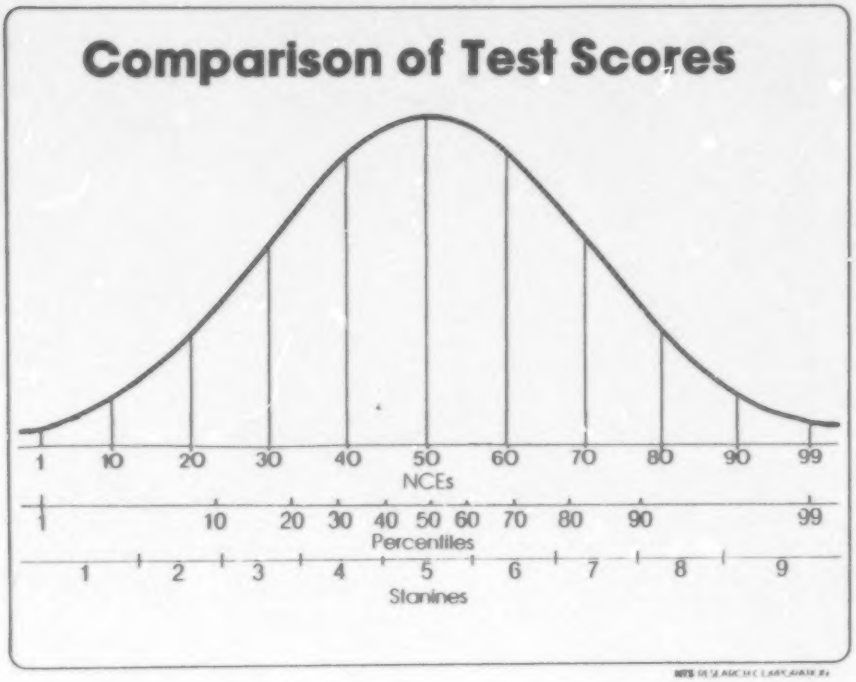
2. Use of the median provides no information about the spread of scores.

NORMAL CURVE

Definition

A normal curve is a distribution of scores or values which, in graphic form, is bell-shaped as shown in Figure A.2. In a normal curve distribution, the mean and the median are at the same point. The majority of the scores are clustered around the mean/median. Sixty-eight percent of the scores are within one standard deviation of the mean/median, and 95 percent are within two standard deviations. Scores which are more than three standard deviations from the mean/median are rather rare, occurring less than 1 percent of the time.

Figure B2



Use

Because of its well-documented statistical properties, the normal curve distribution is often used in reporting test scores as an aid in interpreting scores of groups or individuals.

Precautions

The normal curve distribution is a statistical or mathematical ideal. It is not a graphic description of what a particular distribution should be; distributions which do not conform to the normal curve are not "abnormal." Many variables can affect the distribution of a particular set of scores: test content, difficulty of the test items, suitability of the test for the group to which it is administered.

NORMAL CURVE EQUIVALENT SCORES (NCE)

Definition

NCEs divide the normal distribution into 99 segments, units, or scores (Figure A.2). Scores range from 1-99, with a mean/median of 50. NCEs can be related to percentile ranks as shown in the comparative scales in Figure A.2.

Uses

1. NCEs can be subjected to arithmetic operations. Therefore, mean NCEs can be computed, and differences in NCEs can be compared at all points in the score distribution.[1]

2. NCEs can be used in analyses of group data (for reasons above). In addition, NCEs are scaled to reveal small changes, something which stanine scores will not do consistently because of the large score range at each stanine point.

Precaution(s)

1. Use of NCEs for evaluating individualized performance is to be done with caution. A change of five NCE units on a test score is within the error range for individuals on most standardized tests. However, since NCEs give a false sense of precision--and hence of security--the careless test user could consider such a change meaningful.

2. NCEs are difficult to interpret when presented alone. After an analysis has been performed on the basis of NCEs, results are often converted to some more readily understandable scale like percentile ranks.

NORM-REFERENCED TEST (NRT)

Definition

The NRT is designed to rank students according to the number of test items answered correctly (i.e., according to raw score). Ranking is usually also done in relation to the performance of a norming sample. The California Achievement Tests is an example of an NRT.

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[1] In a strict statistical sense, it is probably incorrect to subject any test scores to arithmetic operations. However, NCEs, standard scores with an underlying normal distribution, raw scores, and stanines come closer than any other score scales to having equal-interval properties which permit arithmetic operations.

Use

Norm-referenced tests provide information about which students know the most about the content included on the test.

Precaution(s)

1. A good NRT is designed to enable between 40 and 70 percent of the examinees to answer any given item correctly. Many items are therefore too difficult for a majority of examinees to get right. This means that most NRTs are not very good tests of what an individual student knows (as opposed to criterion-referenced tests). Rather, they are measures of who knows the most about the test content.

2. NRTs often include only one or two questions which measure achievement of a given skill or objective. Information about student performance on a particular objective is, therefore, usually not very reliable.

NORMS

Definition

Statistics that describe the test performance of specified groups, such as students in a given grade, age range, type of community, etc.

Use

Norms provide a way of relating raw scores to a more meaningful score scale, such as percentile ranks, stanines, grade equivalents, or a standard score, so that it can be determined how a student performed relative to a "representative" sample of students similar in some way.

Precaution(s)

1. Norming samples cannot be perfectly representative of a large group of students. For most major standardized tests, publishers use sophisticated sampling procedures to determine the norming sample. However, there will always be a small error factor. This means that caution must be used when comparing the scores from two different tests or even from two levels of the same test because the levels may not have used the same group of students. The following is an example of what might happen because of this. If the students in the norming sample for Test A are brighter than those in the sample for Test B, the norms for the two tests will not be equivalent. A student who then takes both tests will be likely to attain a lower percentile rank on Test A because he/she is being compared with a brighter group of students on a test which has "more difficult" norms.

2. Test publishers often provide norms for different times of the year such as fall, winter, and spring. However, they may not have used a norming sample at all of these times, which means that some of the norms are estimates. A test manual should be consulted to determine when a given test was normed. Estimated norms for any other time of year should be viewed with caution.

3. Test norms are not necessarily derived every year, and therefore some norms may be several years old. However, it is common practice to compare current student performance on a given test with the performance of the national norming sample. Caution must therefore be exercised in interpreting the meaning of an individual's status. For example, a student who took a test in 1978 and who achieved a percentile rank of 60 probably did not score higher than 60 percent of the students taking the test in 1978. Rather, the individual scored higher than 60 percent of the students in the norming sample who took the test in the past, for example in 1970.

4. The above considerations may weaken the usefulness of older norms. If changes have occurred in curricula, current students may be better prepared in some skills or subjects than were students in the norming sample, less well prepared, or simply differently prepared. Thus, comparisons of percentile ranks across years may be clouded by changing curricula.

5. Norms are derived so that half of the representative group is expected to be below average. This means that half of the group will be below grade level, below a percentile rank of 50 and below the mean. Therefore, it is extremely difficult to have all of the students in any large group perform above the average.

PERCENTILE RANK (PR)

Definition

The percentile rank (PR) expresses the percentage of students in the norming sample who scored at or below a given score. For example, if a raw score of 30 has a percentile rank of 78, then 78 percent of the students in the norming sample scored at or below 30 items correct.

Use

PRs provide easily interpretable information about how a given student's performance on a test compares with the performance of students in the norming sample.

Precaution(s)

1. PRs should not be added nor subtracted because they are not an equal distance apart at all points. For example, Figure 3.2 clearly shows that an increase of 10 points between percentile ranks 45 and 55 is not the same distance as an increase of 10 points between percentile ranks 85 and 95. A person would have to show a larger amount of improvement to achieve the second increase.

2. On a test of fewer than 100 questions, it is not possible for every whole number of the percentile rank scale to have an associated raw score. Therefore, in such circumstances, a one-point increase in raw score can cause an increase of several percentile rank units. What might appear to be substantial increase on the percentile rank scale is really only an increase of one additional question correct. This caveat applies to virtually all tests in standardized batteries.

3. Percentile ranks should not be confused with percent of correct answers (raw scores). They have completely different meanings.

RAW SCORE

Definition

The number of questions or test items answered correctly

Use

Raw scores can be used to report the number of questions answered correctly.

Precaution(s)

1. A raw score has no meaning other than the number of items answered correctly. It provides no interpretative information.

2. Raw scores can be quite misleading when reported by themselves because the meaning of raw scores differs from test to test. For example, if one 50-item test is easy and one 50-item test is difficult, a raw score of 30 on the difficult test might represent better performance than a raw score of 45 on the easier test.

3. Subjecting raw scores to arithmetic operations (e.g. addition, etc.) is a questionable procedure. Generally, raw scores do not have the equal interval property required for these operations. This is because the same raw score can be obtained by different students who get different combinations of items correct. These items will most likely vary in their level of difficulty. Thus, identical raw scores will possibly represent differential levels of achievement.

RELIABILITY

Definition

Reliability refers to the extent to which a test is consistent in what it measures. There are three major types of reliability, all expressed as a coefficient ranging from 0 (complete lack of consistency) to 1 (perfect consistency).

1. Internal consistency is the degree to which all the questions on a test measure the same thing. For example, a mathematics test that measures only addition of fractions will probably have a higher internal consistency coefficient than one that measures several different mathematical operations. This would be especially important for achievement tests that measure specific skills.

2. Stability is the degree to which a person will achieve the same score on a test that is taken twice within a time period of anything from a few days to a year or two. This is important in an instrument which measures a trait like natural ability, which is not expected to change over time.

3. Equivalence is the degree to which a person will achieve the same score on two forms of the same test. This is important for any test in which two forms are to be used interchangeably.

Use

Reliability is a measure of the quality of a test.

Precaution(s)

The type of reliability appropriate for a given testing situation should be used.

SCALE SCORE (SS)

Definition

Scale Scores range from 0 to 999 and provide a link between all levels of the California Achievement Tests.

Uses

1. Scale scores can be subjected to arithmetic operations like Normal Curve Equivalent scores. Therefore, means can be computed and differences in SSs can be compared meaningfully.

2. Scale scores provide a way of comparing scores on different levels of the California Achievement Tests and, therefore, provide a way of measuring growth.

3. The capability of comparing results from different test levels also means that scale scores help to make out-of-level testing possible. This testing procedure allows for a student to take a test for a grade other than his own and still have results (percentile ranks and stanines) based on norms for his/her grade.

Precaution

1. Scale scores should not be used to compare scores in different subject areas. They were not developed so that equivalent scores in two subject areas would indicate equivalent levels of achievement. Any comparison of scale scores should be done within subject areas.

2. There are not "typical" scale scores for each grade or test level. In fact, the ranges of SSs in the various levels overlap considerably.

STANDARD DEVIATION (SD)

Definition

Standard Deviation (SD) is a measure of the dispersion in a set of scores. The closer the scores cluster around the mean, the smaller the SD will be.

Use

As a measure of the spread in a set of scores, the SD can be used to assist in determining the degree of importance of score differences. For example, a difference of 2 points would probably not have much meaning if the SD were 20 but could be quite important if the SD were 0.5.

Precaution(s)

None

STANDARD ERROR OF MEASUREMENT (SEM)

Definition

The SEM is an estimate of the magnitude of error in a test score. Possible causes of error in scores include lucky or unlucky guesses, a student's not feeling well or failing to follow directions, the fact that test questions may be only a sample of those that could be asked, sloppiness, laziness, etc.

Uses

1. The SEM provides a way of determining the possible fluctuation in test scores which would be obtained if an individual were to take the same test a number of times. It indicates how far a particular obtained score might deviate from the individual's "true" score (the score the individual would obtain if there were no error in the test). It is usually assumed that the scores obtained from repeated testing would conform to the normal curve

distribution. Therefore, in practice, it is assumed that there is a probability of 68:100 that the "true" score is within one SEM of the obtained score and that there is a probability of 95:100 that the obtained score is within two SEMs of the obtained score.

2. The SEM can be used in significance testing to provide a way of determining whether differences in test scores or group mean scores are statistically significant (that they vary more than can be reasonably attributed to testing error).

Precaution(s)

None

STANINE

Definition

A stanine is one of the scores of a nine-point division of the normal distribution. Stanine scores range from 1 to 9 with a mean and median of 5. As shown in Figure A.2, each stanine has a range of corresponding percentile ranks or raw scores.

Use?

1. Stanines can be subjected to arithmetic operations (addition, etc.). Therefore, the mean of distributions can be computed, and differences in stanine scores can be compared at all points in the distribution except, in some cases, at the extreme stanine scores of 1 and 9.

2. Stanines do not give a false sense of accuracy of a given score because each stanine covers a range of raw scores. The stanine scale is therefore useful for reporting individuals' scores. Differences in stanines are more likely to represent change beyond that which can be attributed to error than are other kinds of scores.

Precaution(s)

As can be seen in Figure A.2, interpretation of differences in stanine scores is clouded by the range within a given stanine. For example, if an individual's score increases from the top of the Stanine-3 range to the bottom of the Stanine-5 range, it represents less improvement than an increase from the bottom of the Stanine-3 range to the top of the Stanine-4 range. However, on cursory examination, it would seem as if the first increase were the greater.

STATISTICAL SIGNIFICANCE TEST

Definition

A significance test is a statistical procedure used to determine whether two (or more) groups differ on a trait more than could normally be expected if testing error or sampling error were assumed to be the cause of the difference.

Use

Under highly controlled conditions (as in experiments, etc.), tests of statistical significance are used to test hypotheses. When variables cannot be controlled (as in the countywide testing program), the results from such a test are open to question.

Precaution(s)

1. Results of significance tests are reported as probability statements. If the reported probability is less than .01, the chance is less than 1:100 that the difference between groups can be attributed to testing error. If the probability is .001, the chance is less than 1:1000 that the difference can be attributed to testing error. However, there is always some chance (1:1000, etc.) that the difference was caused by error.

2. When a large number of tests of significance are performed, some differences will turn out to be statistically significant by chance alone. That is, since there is always some chance that a difference can be caused by error (1:20, 1:100, 1:1000, etc.), a certain number of significant differences can be expected to occur because of error. There is no way to determine whether a particular statistically significant difference was or was not caused by error. Again, only a probability can be determined.

3. When tests of significance are used to evaluate the difference of means, the larger the group the smaller the difference in means needs to be for statistical significance. The smaller the group, the larger the difference must be. For example, a difference of only 1-2 months on the grade equivalent scale, or a fraction of a raw-score point, will be statistically significant for groups of several thousand students. In contrast, a difference of as much as six months may be required for significance with a group of one hundred students. Because many of the comparisons in this report involve very large groups, no significant tests of differences and means were performed. While small differences would have been statistically significant, they would not have been educationally meaningful.

VALIDITY

Definition

Validity is the extent to which a test does the job for which it is used. There are three major types of validity that a test may possess.

1. Content validity is most important for achievement tests. This requires that a test contain questions that adequately reflect the content the test is supposed to measure.

2. Criterion-related validity is most important for placement tests, college admissions tests, or tests on which employment decisions are based. Performance on the test must be highly correlated with performance in the program, success in college, or success on the job for which the test is a screening instrument.

3. Construct validity is most important in psychological instruments. Tests of ability are examples of such instruments. Construct validity requires that the test adequately discriminate between people who do or do not have a particular trait.

Use

Validity is a measure or concept that helps one evaluate the quality of a test.

Precaution(s)

The type of validity appropriate for a given testing situation should be used.